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**AIM Digest**E: [info@alcoholinmoderation.com](mailto:info@alcoholinmoderation.com)**Websites:**

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Henk Hendriks - **Co-director**  
 E: [henk@alcoholinmoderation.com](mailto:henk@alcoholinmoderation.com)

Creina Stockley - **Co-director**  
 E: [creina@alcoholinmoderation.com](mailto:creina@alcoholinmoderation.com)

Alison Rees - **Editor**  
 E: [alison@alcoholinmoderation.com](mailto:alison@alcoholinmoderation.com)

Zoe Westwood – **Finance and subscriptions**  
 E: [zoe@alcoholinmoderation.com](mailto:zoe@alcoholinmoderation.com)

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## Australia

The Department of Justice and Attorney-General is consulting on proposed measures to develop a new regulatory framework for online alcohol sales and deliveries in Queensland. This consultation will consider the potential benefits, costs, risks, issues and impacts associated with online alcohol sales and deliveries in Queensland.

## France

Certain areas in three Paris arrondissements have banned the purchase of alcohol in supermarkets after 5pm in an attempt to curb night-time noise and disorder. Purchasing alcohol in supermarkets - even in small quantities - will no longer be possible between the hours of 5pm and 8:30am on certain streets in the 9th, 10th and 12th arrondissements of Paris.

## Poland

Councillors in Kraków, Poland's second-largest city, have voted to ban the sale of alcohol in shops between midnight and 5.30 a.m. The new measures, which will go into force on 1 July, will still allow alcohol to be sold in bars and restaurants.

## Uzbekistan

President of Uzbekistan Shavkat Mirziyoyev signed a law restricting the sale of alcohol and tobacco products to persons aged under 21. The document was published on May 25 in the government newspaper *Narodnoye Slovo* and will come into force in three months time.

## Estonia

A study conducted by The National Institute for Health Development in Estonia showed that in less than half of the sales outlets, young people intending to buy alcohol were asked for identification. About half of youth could get an alcoholic beverage without showing an age-proofing document. Small stores, rural areas, and older service personnel were seen as problematic, as well as self-service checkouts in large stores during the alcohol test purchasing research.

## Thailand

Analytics and consulting firm GlobalData reported that Thailand is planning a tax hike on beers with an alcohol by volume (ABV) between 0% and 0.5%, in order to "prevent them from attracting novice drinkers". Thailand currently levies a 22% excise tax on the retail sales of alcoholic beer, while no- and low-alcohol beers are subject to a 14% excise tax, equal to other non-alcoholic and soft drinks. The Thai Public Health Ministry has apparently posited that due to the lower tax rate, no-alcohol beers are technically cheaper than regular beers, thereby being perceived as an alternative to other non-alcoholic refreshments like soft drinks. Therefore, the country's Excise Department has proposed to elevate the tariff on no-alcohol beers to a midway point between that of "carbonates" and regular beer, GlobalData said.

## Alcohol consumption and breast cancer prognosis after breast cancer diagnosis: a systematic review and meta-analysis of the Japanese Breast Cancer Society Clinical Practice Guideline, 2022 edition

### Forum summary

According to the WHO, there are more than 2.3 million cases of breast cancer diagnosed each year, which make it the most common cancer among adults. In 95% of countries, breast cancer is the first or second leading cause of female cancer deaths ([who.int/news/item/03-02-2023-who-launches-new-roadmap-on-breast-cancer](https://www.who.int/news/item/03-02-2023-who-launches-new-roadmap-on-breast-cancer)). Initial meta-analyses such as that of Longnecker et al. (1988) clearly showed risk at higher rates of alcohol consumption, but mixed results at moderate rates, depending on the model. This meta-analysis of 33 more recent studies, however, clearly shows no elevated risk at moderate consumption levels. In the absence of evidence to the contrary, we should continue to discourage heavy consumption because it is likely to be associated with an increased risk of breast cancer, not to mention many other health risks. This report, however, should relieve light to moderate alcohol drinkers of the fear of increasing their risk of breast cancer, and confirm that moderate consumption reduces overall mortality risk as also shown in this meta-analysis.

### Authors

Nomura T, Kawai M, Fukuma Y, Koike Y, Ozaki S, Iwasaki M, Yamamoto S, Takamatsu K, Okamura H, Arai M, Ootani S, Iwata H, Saji S. *Breast Cancer*. 2023. <https://doi.org/10.1007/s12282-023-01455-4>

### Author's abstract

Alcohol consumption is internationally recognized as one of the compelling risk factors for breast cancer, but it does not necessarily correlate with the prognosis of breast cancer patients. Alcohol consumption in breast cancer patients was addressed in the 2022 Breast Cancer Clinical Practice Guidelines.

A systematic review and meta-analysis of epidemiological studies on alcohol consumption and breast cancer recurrence, breast cancer-related mortality, all-cause mortality, and cardiovascular disease mortality in breast cancer patients was performed. The PubMed, Cochrane Library, and Ichushi-Web databases were searched for relevant publications reporting cohort or case-control studies published until March 2021.

A total of 33 studies (32 cohort studies and 1 case-control study) met the eligibility criteria; 4638 cases of recurrence, 12,209 cases of breast cancer-specific mortality, and 21,945 cases of all-cause mortality were observed. With regard to breast cancer recurrence, 7 studies assessed pre-diagnosis alcohol consumption

(relative risk (RR) 1.02, 95% confidence interval (95% CI) 0.77–1.37,  $p = 0.88$ ) and 3 studies assessed post-diagnosis alcohol consumption (RR 0.96, 95% CI 0.85–1.10,  $p = 0.57$ ), and no significant increase or decrease in risk was observed. With regard to breast cancer-related mortality, 19 studies assessed pre-diagnosis alcohol consumption (RR 1.02, 95% CI 0.93–1.11,  $p = 0.69$ ), 9 studies assessed post-diagnosis alcohol consumption (RR 0.96, 95% CI 0.77–1.19,  $p = 0.70$ ), and no significant increase or decrease in risk was observed. With regard to all-cause mortality, 18 studies assessed pre-diagnosis alcohol consumption (RR 0.90, 95% CI 0.82–0.99,  $p = 0.02$ ), 8 studies assessed post-diagnosis alcohol consumption (RR 0.88, 95% CI 0.74–1.02,  $p = 0.08$ ), and pre-diagnosis alcohol consumption was associated with a significantly decreased risk. With regard to cardiovascular disease mortality and alcohol consumption, 2 studies assessed it, and the RR was 0.47 (95% CI 0.28–0.79,  $p = 0.005$ ), showing that alcohol consumption was associated with a significantly decreased risk.

The limitations of this study are that drinking status was mainly based on a questionnaire survey, which is somewhat inaccurate and has many confounding factors, and the cut-off value for the maximum alcohol intake in many studies was low, and it is possible that the actual intake was only an appropriate amount. In many countries, a standard drinking amount is set, and wise decisions are required.

### Forum comments

#### *Background including previous results*

ISFAR has previously reviewed 19 papers on associations between alcohol consumption and incidence of breast cancer, which is the most commonly occurring cancer in women and the most common cancer overall. There were more than 2.26 million new cases of breast cancer in women in 2020 (<https://www.wcrf.org/cancer-trends/breast-cancer-statistics/>).

Alcohol consumption is recognized as one of the risk factors contributing to breast cancer incidence. This association has been observed for both pre- and post-menopausal women of all ages, and is observed to be independent of the type of alcoholic beverage consumed (Rosenberg et al. 1993, Longnecker 1994, Hamajima et al. 2003, Petri et al. 2004, Key et al. 2006). The association with may also be more significant for certain subtypes of breast cancer for example, hormone-sensitive rather than hormone-insensitive subtypes (Millikan et al. 2008, Dolle et al. 2009, Kwan et al. 2009, Li et al. 2010, Kabat et al. 2011).

The increased risk of breast cancer from alcohol consumption is additive to the other risk factors. The other risk factors are genetic, environmental including age of menarche, childbearing, breastfeeding and hormone replacement therapy, and lifestyle including diet and exercise; these contribute more heavily to the overall breast cancer risk.

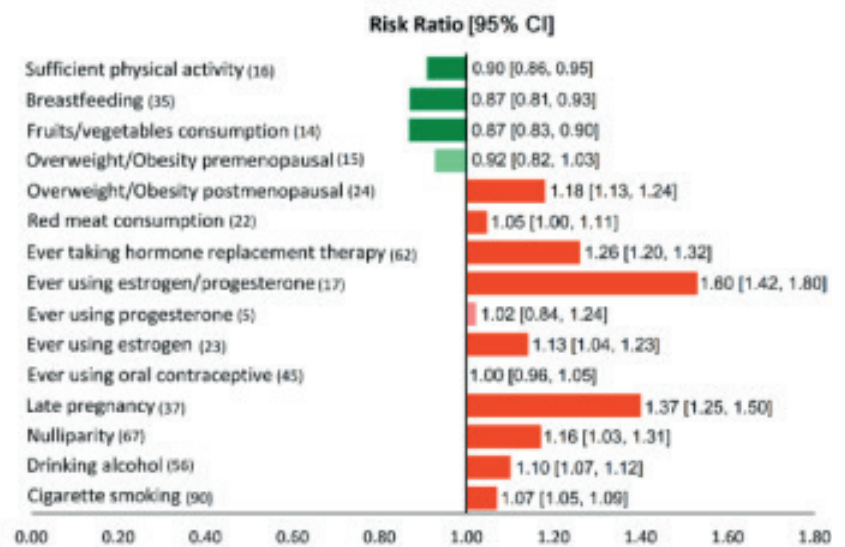
Much attention has been focused on alcohol consumption, however, since it is a modifiable lifestyle factor and may, therefore, be more easily 'managed' and 'changed' to reduce the risk for this cancer.

The association between alcohol consumption and incidence of breast cancer has long been a topic of research and initially yielded contradictory results. The first purported positive association between alcohol consumption and breast cancer was reported in 1977 by Williams and Horn. The results showed strong evidence of a dose-response relation; however, the slope of the dose-response curve was quite modest.

A positive linear association between alcohol consumption and breast cancer incidence has since been confirmed after pooling most of the large epidemiological studies. Indeed, the first meta-analyses indicated an additional increased risk of approximately 10% for every 10 g of alcohol consumed per day (Longnecker et al., 1988, 1994, Smith-Warner et al., 1998) compared with non-drinkers. Approximately 1 in 8 women in the USA and Europe develop breast cancer, that is, women have 12.5% risk of developing breast cancer. Consequently a 5 – 10% increase from alcohol consumption suggests that a woman's total risk increases from 12.5% to 13.1 – 13.8% if she is a drinker compared to a non-drinker (Hendriks, 2020).

A recent overall extensive meta-analysis took 15 different factors into account for breast cancer risk and attempted to put them into context (Poorolajal et al., 2021). Estrogen/progesterone intake and late pregnancy were identified as the first and second most significant positive risk factors for breast cancer, respectively, whereas sufficient fruit/vegetable consumption and sufficient physical activity were the first and second most protective factors against breast cancer, respectively (see

figure below). Alcohol consumption was ranked 10 out of the 11 positive risk factors.



The role of the estrogen receptor (ER) in the association between alcohol consumption and breast cancer risk is also an interesting debate. Some authors report that the effect of drinking on the incidence of breast cancer is mainly manifested in estrogen receptor positive breast cancers (about 10% per any additional 10 g/day) (Sun et al., 2020).

Also, evidence for an association of alcohol consumption with prognosis after a diagnosis of breast cancer has been inconsistent. Based on a meta-analysis of 11 studies Ali et al. (2014) concluded that there was little evidence that pre- or post-diagnosis alcohol consumption is associated with breast cancer-specific mortality for women with ER-positive disease. There was weak evidence that moderate post-diagnosis alcohol intake is associated with a small reduction in breast cancer-specific mortality in ER-negative disease.

**Forum Comments**

This paper by Nomura et al. (2023) reports on a quantitative and qualitative systematic review and meta-analysis performed according to the Minds Handbook for Clinical Practice Guideline Development, a guideline issued by the Japanese Council for Quality Health Care. The paper was published in the Breast Cancer Society's journal called Breast Cancer as a follow-up of questions raised while issuing their clinical practice guidelines, namely 'Is alcohol consumption associated with prognosis in breast cancer patients?'



### Methodology

Papers were selected from international literature using relevant original papers and moderate quality review papers according to AMSTAR. Selection yielded 33 studies, 32 of which were cohort studies, in total covering 4,638 cases of recurring breast cancer. Follow-up varied between about 3 and 11 years.

Interestingly, this study not only evaluated the recurrence of breast cancer in association with alcohol consumption. The authors also assessed some benefits associated with alcohol consumption. This was done because the reduction in all-cause mortality associated with alcohol consumption after the diagnosis of breast cancer may be related to a decreased cardiovascular disease mortality. So, papers were included in this meta-analysis when alcohol consumption was not only studied in relation to breast cancer recurrence, but also in relation to breast cancer-related mortality, all-cause mortality in breast cancer patients and cardiovascular disease mortality in both breast cancer patients and healthy patients. This meta-analysis, therefore, also reported on 12,209 cases of breast cancer related mortality, 21,945 cases of all-cause mortality and 7,727 cases of cardiovascular mortality. An advantage of such an approach is that linkage is made with existing and well-described associations on alcohol consumption and health outcomes. This may further strengthen the reliability of the results obtained in this relatively new area of meta-analysis.

A full overview of potential risk of bias was provided in the paper. Most studies were unclear on the possible risk of selection bias of the non-exposed cohort, mainly because these studies were observational and therefore not randomly assigned. But the authors considered the risk for allocation concealment, blinding of participants and personnel as well as selective reporting low. A minority of studies had an unclear risk of incomplete outcome data mainly caused by a short follow-up period. Similarly, adjustment for confounding was inadequate in 5 studies included and insufficient in an additional 7 out of the 33 studies included. This issue was mentioned as a limitation of this meta-analysis but were considered not to affect the overall conclusions of the meta-analysis, since the recommendation was in line with the outcomes reported for all 33 studies included.

### Results

The main result indicates that all studies combined do not show an increased nor a decreased risk for breast cancer recurrence associated with alcohol consumption. This conclusion is surprising since alcohol has been positively associated with breast cancer risk in various meta-analyses. There is not a priori reason to assume that the risk for breast cancer may change after breast cancer has occurred in these women. Therefore, one would expect breast cancer risk attributable to alcohol consumption to be similar both before and after breast cancer diagnosis. One of the possible explanations, which was not discussed by the authors, may be that the studies selected for this meta-analysis were studies having included women drinking lightly or only moderately. Exposure in most studies varied from < 4 g/d up to 1-2 drinks per day. Only a few studies included concerned heavier drinking women, which may have beneficially affected the outcome.

The studies analysed numerous variables that may affect outcome. Firstly, the authors analysed the effect of pre- and post-diagnosis assessment of alcohol consumption in relation to the breast cancer recurrence. Both the analyses did not show a significant association. Also, the association of alcohol consumption with breast cancer mortality was investigated, both using pre- and postdiagnosis alcohol intake assessment and both for ER-positive and ER-negative cases. All associations were not significant with the ER-positive breast cancers having a borderline lower RR associated with alcohol consumption. A similar analysis on alcohol consumption and all-cause mortality in these cohorts showed that pre-diagnosis alcohol assessment was associated with a reduced RR, whereas post-diagnosis alcohol assessment was not associated with a changed RR. Breast cancer patients showed a small decrease in all-cause mortality risk, the reduced risk being present in both ER positive as well as in ER negative cases. These results correspond nicely with what is usually seen in general populations in which all participants are apparently healthy at the start of the study.

The authors concluded that these findings resulted in the following recommendation to the Japanese Breast Cancer Society Clinical Practice Guideline Committee: whether pre-diagnosis or post-diagnosis, alcohol consumption has a substantial

effect on risk and is unlikely to increase the risk of breast cancer recurrence and death from breast cancer.

### Discussion

Pre- and post-diagnosis alcohol consumption was analysed extensively in this study. The authors do not specify a reason for this specific interest, but it is logical to assume that women may change their drinking habits after breast cancer diagnosis. It is unclear from the study results if women did really change their drinking habits or not.

Another factor relevant to their guidance is the low occurrence of breast cancer in Japan, actually Japan has one of the lowest incidences of this type of cancer in the world. Although Japanese women have a relatively low risk of breast cancer compared with women in Western countries, the incidence rate has been increasing rapidly, and breast cancer is currently the leading cancer among Japanese women. The incidence rate of breast cancer among Japanese women increases with increasing age but decreases or flattens after 50 years of age, whereas it increases irrespective of age among women in Western countries (Liu et al., 2019). Japan also is one of the countries that has the highest life expectancy. One of the reasons may be related to the diet, which is high in isoflavone, which is known to be associated with lower risk of breast cancer and prostate cancer. The relatively higher soy intake may account for the low breast and prostate cancer mortality in Japan. Soy and isoflavone intake have also been inversely associated with risk of cardiovascular diseases, especially cerebral and myocardial infarctions (Tsugane, 2020). It may have been interesting to see if studies performed in Japan and/or in that region of the world would have yielded similar results as compared to those in the rest of the world.

Also, the authors did not discuss the mechanism that may underly the absence of an increased risk of breast cancer reoccurrence. One may have expected a similar outcome, viz a similar positive association between alcohol consumption and breast cancer risk both before and after breast cancer diagnosis. The prevailing theory for the mechanism for breast cancer induction by alcohol consumption is that toxic metabolites of alcohol, namely acetaldehyde, would induce DNA mutations causing breast cancer. However, it is unclear whether acetaldehyde may be the real

cause of breast cancer. It generally requires high levels of alcohol use and/or a deficiency in the ability to metabolize acetaldehyde. To what extent acetaldehyde accumulation occurs in breast tissue may not be immediately obvious, since ethanol metabolism is predominantly hepatic.

More indirect consequences of alcohol use, on oestrogen levels, or the effects of oestrogen, are another set of pathways by which alcohol could act more broadly, including in breast tissue. Thus, a broader perspective may be needed. Epigenetic mechanisms are likely to be affected through other mechanisms than oxidative ethanol metabolism and may be altered in multiple tissues. However, there is little specific understanding of the impact alcohol has on these regulatory mechanisms and, in particular there is no information on dose dependency and temporal consequences of these actions. Despite these insights, however, the overall lack of mechanistic understanding of these regulatory events is a major obstacle in understanding causal factors relevant for this disease (Zakhari & Hoek, 2018).

### Specific Comments from Forum Members

Forum Member Ellison considers that "breast cancer is common around the world and appears to be the disease that is especially feared by most women. While diet, exercise, and obesity have been shown to affect the risk of breast cancer, the discovery that alcohol intake may be a factor in the initial diagnosis created an unusual amount of attention: finally, something that relates to the risk and can be avoided may lower the risk of this dread disease!

While most studies continue to show a slight increase in the risk of incident breast cancer from moderate drinking, the apparent degree of associated risk is usually seen to be very small (and alcohol intake is ranked very low in the list of potential risk factors, as discussed in this critique). Further, the risk of mortality from breast cancer has not been found to be increased by moderate alcohol intake, and total mortality is almost always found to be reduced by moderate drinking. Further, this study shows that alcohol consumption following the diagnosis of breast cancer may actually lower, rather than increase, the risk of total mortality.

Unfortunately, we remain mainly ignorant of important, modifiable steps that women can take to reduce their risk of breast cancer. In terms of

the prevention of such cancer, avoiding moderate alcohol consumption is not the key factor we have been looking for.”

Forum Member Waterhouse stated that “in comparing this report to the famous Longnecker et al. (1988) study I am struck by the fact that all the studies cited here in Nomura et al. (2023) were published after 1988. There were three studies that predated 2000, but the majority were published after 2010. The evolution of research standards would suggest that the later studies were conducted with more stringent management, so the current meta-analysis should have a better foundation. It is interesting that Longnecker et al. (1988) clearly showed risk at higher rates of consumption, but mixed results at moderate rates, depending on the model, and this report clearly shows no elevated risk at moderate consumption levels. In the absence of evidence to the contrary, we should continue to discourage heavy consumption because it is likely to be associated with an increased risk of breast cancer, not to mention many other risks. This report, however, should relieve moderate drinkers of the fear of increasing their risk of breast cancer, and confirm that moderate consumption reduces overall mortality risk.

Forum Member Skovenborg adds that “this is a competent and non-biased review and meta-analysis showing that light alcohol consumption is not associated with breast cancer recurrence and breast cancer mortality, and actually it is associated with reduced all-cause mortality. Among these seven lifestyle recommendations from the American Institute for Cancer Research and American Cancer Society is #6) avoid alcohol. A recent prospective cohort study of 1340 patients with high-risk breast cancer found that high adherence to these recommendations was associated with a 37% reduced hazard of breast cancer recurrence and a 58% reduced hazard of mortality. (Cannioto et al. 2023). However, the benefits were due to full adherence to physical activity advice and non-smoking and recommendations regarding fruit and vegetable and sugar-sweetened beverage, while no statistically significant associations were observed for alcohol consumption and breast cancer recurrence and breast cancer mortality. Thus, the data from the cohort study by Cannioto et al. are in line with the meta-analysis from Nomura et al. (2023).”

Further, Forum Member Gaetano suggests that “even if moderate alcohol would (slightly) increase breast cancer risk, the greater reduction of CVD in women would remain a prevailing factor to reduce total mortality”.

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Comments on this critique by the International Scientific Forum on Alcohol Research were provided by the following members:

Henk Hendriks, PhD, Netherlands

Creina Stockley, PhD, MBA, Adjunct Senior Lecturer in the School of Agriculture, Food and Wine at the University of Adelaide, Australia

R Curtis Ellison, MD, Section of Preventive Medicine/Epidemiology, Boston University School of Medicine, Boston, MA, USA

Andrew Waterhouse, PhD, Department of Viticulture and Enology, University of California, Davis.

Erik Skovenborg, MD, specialized in family medicine, member of the Scandinavian Medical Alcohol Board, Aarhus, Denmark

Pierre-Louis Teissedre, PhD, Faculty of Oenology-ISVV, University Victor Segalen Bordeaux 2, Bordeaux, France

Giovanni Gaetano, MD, PhD, Department of Epidemiology and Prevention, IRCCS Istituto Neurologico Mediterraneo NEUROMED, Pozzilli, Italy

## Lifestyle, Diet, Wine And Health Congress gathers leading international scientists in Toledo

Thirty leading scientists from Europe, North America, South Africa and Australia will present the latest research on diet, healthy lifestyle and moderate consumption of wine.

Organised by the Wine Information Council (WIC) and Fundación para la Investigación del Vino y la Nutrición (FIVIN) this congress is the most important international scientific event about lifestyle, diet, wine and health aspects of the last five years.

The international Congress will be held in the Palacio de Congresos El Greco of the historic City

of Toledo, Spain, between the 18th and the 20th of October, 2023.

The scientific programme will include presentations on the Global Burden of Disease Study, Cardiovascular Health, Health Implications of Lifestyle Choices, Importance of Context when consuming wine moderately, the Keys to Longevity and how to translate Science to Society.

[lifestylewine2023.com](http://lifestylewine2023.com)



## Association of alcohol consumption with cognition in older population

A study investigated the cross-sectional association between alcohol consumption and cognition in older adults and if it is different across sexes or depends on amyloid- $\beta$  ( $A\beta$ ) accumulation in the brain.

4,387 cognitively unimpaired older adults with objective and subjective cognitive assessments and amyloid positron emission tomography (PET) imaging were classified into four categories based on their average daily alcohol use. Multivariable linear regression was then used to test the main effects and interactions with sex and  $A\beta$  levels.

Individuals who reported no alcohol consumption had lower scores on the Preclinical Alzheimer Cognitive Composite (PACC) compared to those consuming one or two drinks/day. In sex-stratified analysis, the association between alcohol consumption and cognition was more prominent in females. Female participants who consumed two drinks/day had better performance on PACC and Cognitive Function Index (CFI) than those

who reported no alcohol consumption. In an  $A\beta$ -stratified sample, the association between alcohol consumption and cognition was present only in the  $A\beta$ - subgroup. The interaction between  $A\beta$  status and alcohol consumption on cognition was not significant.

The study found that low or moderate consumption of alcohol was associated with better objective cognitive performance and better subjective report of daily functioning in cognitively unimpaired individuals. The association was present only in  $A\beta$ - individuals, suggesting that the pathophysiologic mechanism underlying the effect of alcohol on cognition is independent of  $A\beta$  pathology. Further investigation is required with larger samples consuming three or more drinks/day.

Source: Nallapu BT, Petersen KK, Lipton RB, Grober E, Sperling RA, Ezzati A. Association of Alcohol Consumption with Cognition in Older Population: The A4 Study. *J Alzheimers Dis.* 2023 May 9. doi.org/10.3233/JAD-221079.

## Alcohol consumption and the risk of heart failure: the Suita Study and meta-analysis of prospective cohort studies

Alcohol consumption is a modifiable lifestyle, but its role in heart failure (HF) development is controversial. Researchers investigated the prospective association between alcohol consumption and HF risk.

A total of 2,712 participants (1,149 men and 1,563 women) from the Suita Study were followed up every two years. Hazard ratios (HRs) and 95% confidence intervals (95% CIs) of HF risk were calculated for heavy drinking ( $\geq 46$  g/day in men or  $\geq 23$  g/day in women) and never drinking compared to light drinking ( $< 23$  g/day in men or  $< 11.5$  g/day in women). The results of the Suita Study were then combined with those from other eligible prospective cohort studies in a meta-analysis using the random-effects model.

In the Suita Study, within a median follow-up period of 8 years, 319 HF cases (162 in men and

157 in women) were detected. In men, but not women, never and heavy drinking carried a higher risk of HF than light drinking: HRs (95% CIs) = 1.65 (1.00, 2.73) and 2.14 (1.26, 3.66), respectively. Similarly, the meta-analysis showed a higher risk of HF among heavy drinkers: HR (95% CI) = 1.37 (1.15, 1.62) and abstainers: HR (95% CI) = 1.18 (1.02, 1.37).

The results indicated a J-shaped association between alcohol consumption and HF risk among Japanese men. The results of the meta-analysis came in line with the Suita Study. Heavy-drinking men should be targeted for lifestyle modification interventions, the authors suggest.

Source: Arafa A, Kashima R, Kokubo Y, Teramoto M, Sakai Y, Nosaka S, Kawachi H, Shimamoto K, Matsumoto C, Gao Q, Izumi C. Alcohol consumption and the risk of heart failure: the Suita Study and meta-analysis of prospective cohort studies. *Environ Health Prev Med.* 2023;28:26. doi.org/10.1265/ehpm.22-00231.

## Alcohol consumption and all-cause and cause-specific mortality among US adults

Previous studies have shown inconsistent findings regarding the association of light to moderate alcohol consumption with cause-specific mortality. Therefore, a study sought to examine the prospective association of alcohol consumption with all-cause and cause-specific mortality in the US population.

Adults aged 18 years or older in the National Health Interview Survey (1997 to 2014) with linkage to the National Death Index records through December 31, 2019 were included in the study. Self-reported alcohol consumption was categorised into seven groups (lifetime abstainers; former infrequent or regular drinkers; and current infrequent, light, moderate, or heavy drinkers). The main outcome was all-cause and cause-specific mortality.

During an average follow-up of 12.65 years, among the 918,529 participants (mean age 46.1 years; 48.0% male), 141,512 adults died from all causes, 43,979 from cardiovascular disease (CVD), 33,222 from cancer, 8,246 from chronic lower respiratory tract diseases, 5,572 from accidents (unintentional injuries), 4,776 from Alzheimer's disease, 4,845 from diabetes mellitus, 2,815 from influenza and pneumonia, and 2,692 from nephritis, nephrotic syndrome, or nephrosis. Compared with lifetime abstainers, current infrequent, light, or moderate drinkers were at a lower risk of mortality from all causes [infrequent—hazard ratio: 0.87; 95%

confidence interval: 0.84 to 0.90; light: 0.77; 0.75 to 0.79; moderate 0.82; 0.80 to 0.85], CVD, chronic lower respiratory tract diseases, Alzheimer's disease, and influenza and pneumonia. Also, light or moderate drinkers were associated with lower risk of mortality from diabetes mellitus and nephritis, nephrotic syndrome, or nephrosis. In contrast, heavy drinkers had a significantly higher risk of mortality from all causes, cancer, and accidents (unintentional injuries). Furthermore, binge drinking  $\geq 1$  day/week was associated with a higher risk of mortality from all causes (1.15; 1.09 to 1.22), cancer (1.22; 1.10 to 1.35), and accidents (unintentional injuries) (1.39; 1.11 to 1.74).

Infrequent, light, and moderate alcohol consumption were inversely associated with mortality from all causes, CVD, chronic lower respiratory tract diseases, Alzheimer's disease, and influenza and pneumonia. Light or moderate alcohol consumption might also have a beneficial effect on mortality from diabetes mellitus and nephritis, nephrotic syndrome, or nephrosis. However, heavy or binge had a higher risk of all-cause, cancer, and accidents (unintentional injuries) mortality.

Source: Tian, Y., Liu, J., Zhao, Y. et al. Alcohol consumption and all-cause and cause-specific mortality among US adults: prospective cohort study. *BMC Med* 21, 208 (2023). doi.org/10.1186/s12916-023-02907-6

## Fatty liver disease, metabolism and alcohol interplay: A comprehensive review

Non-alcoholic fatty liver disease (NAFLD) is the most common cause of chronic liver disease worldwide, and its incidence has been increasing in recent years because of the high prevalence of obesity and metabolic syndrome in the Western population. Whether alcohol-related liver disease (ArLD) impacts the prognosis and progression of liver damage in patients with NAFLD is still a matter of debate. The synergistic deleterious effect of obesity and diabetes is clearly established in patients with ArLD and heavy alcohol consumption. However, it is still unknown whether low to moderate amounts of alcohol are good or bad for liver health.

A meta-analysis published in the *International Journal of Molecular Sciences* reviewed the pathophysiology of both disorders and measured the impact of alcohol consumption in patients with NAFLD.

Although some studies reveal a potential beneficial effect of light to moderate alcohol consumption in patients with NAFLD in terms of hepatic steatosis and insulin resistance improvement, most of those studies have potential bias, and their results should be considered with caution.

Source: Odriozola A; Santos Laso A; Del Barrio M; Cabezas J; Iruzubieta P; Arias Loste MT; Rivas C; et al, 'Fatty liver disease, metabolism and alcohol interplay: a comprehensive review', *International Journal of Molecular Sciences*, Vol 24, No 9, 2023, Art No 7791, 24pp [R186877] doi.org/10.3390/ijms24097791.

## Review of alcohol as a modifiable risk factor for Alzheimer's disease-evidence from experimental studies

An article in the May edition of *The International Journal of Molecular Science*, reviews published experimental studies (cell culture and AD rodent models) to summarise the scientific evidence and probable mechanisms (both cerebral and hepatic) by which alcohol promotes or protects against AD progression.

Alzheimer's disease (AD) is a progressive neurodegenerative disease characterised by cognitive impairment and memory loss. Epidemiological evidence suggests that heavy alcohol consumption aggravates AD pathology, whereas low alcohol intake may be protective. However, these observations have been inconsistent, and because of methodological discrepancies, the findings remain controversial.

Alcohol-feeding studies in AD mice support the notion that high alcohol intake promotes AD, while also hinting that low alcohol doses may be protective against AD. Chronic alcohol feeding to AD mice that delivers alcohol doses sufficient to

cause liver injury largely promotes and accelerates AD pathology. The mechanisms by which alcohol can modulate cerebral AD pathology include Toll-like receptors, protein kinase-B (Akt)/mammalian target of rapamycin (mTOR) pathway, cyclic adenosine monophosphate (cAMP) response element-binding protein phosphorylation pathway, glycogen synthase kinase 3- $\beta$ , cyclin-dependent kinase-5, insulin-like growth factor type-1 receptor, modulation of  $\beta$ -amyloid ( $A\beta$ ) synthesis and clearance, microglial mediated, and brain endothelial alterations. Besides these brain-centric pathways, alcohol-mediated liver injury may significantly affect brain  $A\beta$  levels through alterations in the peripheral-to-central  $A\beta$  homeostasis.

Source: Chandrashekar DV, Steinberg RA, Han D, Sumbria RK. Alcohol as a Modifiable Risk Factor for Alzheimer's Disease-Evidence from Experimental Studies. *Int J Mol Sci*. 2023 May 30;24(11):9492. doi.org/10.3390/ijms24119492

## Habitual adherence to a traditional Mediterranean diet and risk of SARS-CoV-2 infection and Coronavirus disease 2019 (COVID-19)

Evidence on habitual Mediterranean diet (MD) and risk of SARS-CoV-2 infection, and COVID-19 is limited. 1,520 participants from the Moli-sani Study (2017-2020) were tested during January-September 2021 and adherence to MD was ascertained through the Mediterranean Diet Score (MDS). SARS-CoV-2 infection cases were determined through serology, and previous clinical diagnosis of COVID-19 disease was self-reported.

The MDS was not associated with the likelihood of SARS-CoV-2 infection (OR= 0.94; 95% CI: 0.83-1.06) and COVID-19 (OR= 0.82; 95% CI: 0.62-1.10) diagnosis. High consumption of cereals was associated with lower odds of SARS-CoV-2 infection (OR = 0.91; 95% CI: 0.83-1.00; for each 25 g/d increase). Likelihood of having been diagnosed with COVID-19 disease decreased in

association with increasing olive oil intake (OR= 0.10; 95% CI: 0.01-0.79; for each additional 10 g/d), moderate alcohol consumption (OR= 0.18; 95% CI: 0.04-0.82) and higher intakes of fruits and nuts (OR = 0.89; 95% CI: 0.79-0.99).

The findings emphasise the adoption and maintenance of a balanced MD as a key strategy to reduce the risk of future SARS-CoV-2 infections and COVID-19.

Source: Sharma S, Di Castelnuovo A, Costanzo S, Persichillo M, Panzera T, Ruggiero E, De Curtis A, Storto M, Cavallo P, Gianfagna F, Donati MB, de Gaetano G, Cerletti C, Iacoviello L, Bonaccio M; Moli-sani Study Investigators. Habitual adherence to a traditional Mediterranean diet and risk of SARS-CoV-2 infection and Coronavirus disease 2019 (COVID-19): a longitudinal analysis. *Int J Food Sci Nutr*. 2023 Jun 1:1-13. doi.org/10.1080/09637486.2023.2212879.

## Associations of habitual alcohol drinking with HDL cholesterol and D-dimer in patients with peripheral arterial disease

The risk of cardiovascular disease is lower in light-to-moderate alcohol drinkers than in non-drinkers in the general population. However, it remains to be clarified whether these beneficial effects of alcohol are shown in patients with peripheral arterial disease (PAD).

The subjects were 153 male outpatients with PAD and they were divided by frequency of drinking into non-drinkers, occasional drinkers (1-4 day/wk) and regular drinkers (5-7 day/wk). Relationships of alcohol drinking with variables related to progression of atherosclerosis and cardiovascular risk were investigated.

The levels of HDL cholesterol and d-dimer were significantly higher and lower, respectively, in regular drinkers than in non-drinkers, while there were no significant differences in BMI, blood pressure, total cholesterol, LDL cholesterol,

triglycerides, hemoglobin A1c, platelet count, fibrinogen, ankle brachial index and intima-media thickness of the carotid artery in non-, occasional and regular drinkers. Odds ratios of regular drinkers vs. non-drinkers for low HDL cholesterol (0.24 [0.08-0.70]) and high d-dimer (0.29 [0.14-0.61]) were significantly lower than the reference level.

In patients with PAD, habitual alcohol drinking was associated with increase of HDL cholesterol and suppression of blood coagulability. However, progression of atherosclerosis was not different in non-drinkers and drinkers.

Source: Sotoda Y, Hirooka S, Orita H, Wakabayashi I. Associations of habitual alcohol drinking with HDL cholesterol and D-dimer in patients with peripheral arterial disease. *Clin Chim Acta*. 2023 Jun 8;117422. doi.org/10.1016/j.cca.2023.117422

## Burden of high-risk phenotype of heavy alcohol consumption among obese US population: results from National Health and Nutrition Examination Survey, 1999–2020

The phenotype of combined heavy alcohol consumption and obesity has the potential to pose as a considerable health burden in the US. No studies using nationally representative data in the US have reported their secular joint prevalence trends. Researchers estimated the prevalence and examined the joint trends of heavy alcohol use and obesity over time among adult US men and women in different age groups and according to race/ethnicity.

Using data from 10 cycles of the US National Health and Nutrition Examination Survey (NHANES) from 1999 to 2020, the researchers examined secular trends in the combined phenotype of heavy drinking and obesity overall and by age-group, sex, and race/ethnicity. The main outcome measures were prevalence of heavy alcohol consumption (>14 drinks/week in men and >7 drinks/week in women) and obesity (BMI  $\geq$ 30).

In 45,292 adults (22,684 men, mean age 49.26 years; and 22,608 women, mean age 49.86), the overall weighted prevalence of combined heavy alcohol drinking and obesity increased from 1.8% (95% CI: 1.2%, 3.1%) in 1999–2000 to 3.1% (95% CI: 2.7%, 3.7%) in 2017–2020 representing an increase of 72% over time. The combined phenotype of

heavy alcohol consumption and obesity increased by 3.25% (95% CI: 1.67%, 4.85%) per year overall from 1999 to 2017. An increasing trend of 9.94% (95% CI: 2.37%, 18.06%) per year was observed among adults aged between 40 and 59 years from 2007 onwards. Prevalence of heavy alcohol consumption in obesity increased at a faster rate among women (APC, 3.96%; 95% CI: 2.14%, 5.82%) than men (APC, 2.47%; 95% CI: 0.63%, 4.35%), and increased among non-Hispanic Whites (APC, 4.12%; 95% CI: 1.50%, 6.82%) and non-Hispanic Blacks (APC, 2.78%; 95% CI: 0.47%, 5.14%), but not Hispanics.

The prevalence of combined heavy alcohol consumption and obesity increased overall in the US, but the rate of increase differed by age, sex, and race/ethnic groups. Given their independent and potential synergistic effects on premature mortality, public health policies on alcohol consumption need to reflect the background obesity epidemic, the researchers argue.

Source: Raza SA, Sokale IO, Thrift AP. Burden of high-risk phenotype of heavy alcohol consumption among obese U.S. population: results from National Health and Nutrition Examination Survey, 1999-2020. *Lancet Reg Health Am*. 2023 May 30;23:100525. doi.org/10.1016/j.lana.2023.100525.

## Polyphenol intake and mortality: A nationwide cohort study in the adult population of Spain

Polyphenols are secondary metabolites present in small quantities in plant-based food and beverages, with antioxidant and anti-inflammatory properties. Main groups of polyphenols include flavonoids, phenolic acids, stilbenes, and lignans, but their association with mortality has barely been examined. A research team assessed the association between the intake of 23 polyphenol subgroups and all-cause, cardiovascular, and cancer mortality in a representative sample of the Spanish adult population.

Population-based cohort study conducted with 12,161 individuals aged 18+ recruited in 2008-2010 and followed-up during a mean of 12.5 years. At baseline, food consumption was obtained with a validated dietary history, and the Phenol-Explorer database was used to estimate polyphenol intake. During follow-up, 967 all-cause deaths occurred, 219 were cardiovascular, and 277 cancer. Comparing extreme categories of consumption, hazard ratios (95% CI) of total mortality for subgroups were: dihydroflavonols 0.85 (0.72-1.00); flavonols 0.79 (0.63-0.97); methoxyphenols 0.75 (0.59-0.94); tyrosols 0.80 (0.65-0.98); alkylmethoxyphenols 0.74 (0.59-

0.93); hydroxycinnamic acids 0.79 (0.64-0.98); and hydroxyphenilacetic acids 0.82 (0.67-0.99). For cardiovascular mortality, hazard ratios were: methoxyphenols 0.58 (0.38-0.89); alkylmethoxyphenols 0.59 (0.39-0.90); hydroxycinnamic acids 0.63 (0.42-0.94); and hydroxyphenilacetic acids 0.69 (0.48-0.99), when comparing extreme tertiles of consumption. No statistically significant associations were observed for cancer. The main food sources for these polyphenol subgroups were red wine, leafy green vegetables, olive oil, green olives, and coffee (the latter being the major contributor of methoxyphenols, alkylmethoxyphenols, and hydroxycinnamic acids).

In the Spanish adult population, intake of specific polyphenol subgroups was prospectively associated with a 20% lower all-cause mortality risk. This decrease was mainly due to a 40% lower cardiovascular mortality risk over time.

María Mérida D, Vitelli-Storelli F, Moreno-Franco B, Rodríguez-Ayala M, López-García E, Banegas JR, Rodríguez-Artalejo F, Guallar-Castillón P. Polyphenol intake and mortality: A nationwide cohort study in the adult population of Spain. *Clin Nutr.* 2023 Jul;42(7):1076-1085. doi.org/10.1016/j.clnu.2023.05.020

## Study of cardiovascular risks in adolescents (ERICA): alcohol consumption and associated factors

A study analysed factors that influence alcohol consumption by Brazilian adolescents aged 12 to 17 years from the five macro-regions of Brazil, according to sociodemographic, schooling, and family characteristics.

The cross-sectional study was based on data from the Study of Cardiovascular Risks in Adolescents (ERICA). The outcome was assessed by alcohol consumption and considered the variables sex, age, ethnicity/skin colour, maternal schooling level, having housemaids, number of bathrooms at home, living or not with parents, and type of school. For the analyses, the survey mode was used for complex samples. Poisson regression was performed to assess the magnitude of factors associated with alcohol consumption among adolescents.

The prevalence of alcohol consumption by adolescents was 22.1%. The variables age range of

15 to 17 years, higher socioeconomic status, and living alone or with only one of the parents were factors that remained associated with alcohol consumption by adolescents regardless of their region of residence. Protective factors in alcohol consumption were associated with variables related to lower economic conditions and being of Asian or indigenous descent. The authors comment that the percentage of adolescents who consume alcohol is worrisome and must be tackled with public policies and health education. Understanding which factors are related to this situation contributes to practices and policies aimed to reduce its prevalence and damage to health.

Source: Miguez FGG, Oliveira G, Correa MM, Oliveira ERA. Study of Cardiovascular Risks in Adolescents (ERICA): alcohol consumption and associated factors. *Rev Bras Epidemiol.* 2023 May 8;26:e230025. doi.org/10.1590/1980-549720230025.

## Prevalence of alcohol-associated liver disease: a systematic review and meta-analysis

Alcohol-associated liver disease (ALD) is a common cause of morbidity and premature mortality. To date, there has been no systematic synthesis of the prevalence of ALD. A systematic review was conducted with the aim of reporting the prevalence of ALD across different health care settings.

PubMed and EMBASE were searched for studies reporting the prevalence of ALD in populations subjected to a universal testing process. Single-proportion meta-analysis was performed to estimate the prevalence of all ALD, alcohol-associated fatty liver, and alcohol-associated cirrhosis, in unselected populations, primary care, and among patients with alcohol-use disorder (AUD).

Thirty-five studies were included reporting on 513,278 persons, including 5,968 cases of ALD, 18,844 cases of alcohol-associated fatty liver,

and 502 cases of alcohol-associated cirrhosis. In unselected populations, the prevalence of ALD was 3.5% (95% CI, 2.0%–6.0%), the prevalence in primary care was 2.6% (0.5%–11.7%), and the prevalence in groups with AUD was 51.0% (11.1%–89.3%). The prevalence of alcohol-associated cirrhosis was 0.3% (0.2%–0.4%) in general populations, 1.7% (0.3%–10.2%) in primary care, and 12.9% (4.3%–33.2%) in groups with AUD.

Liver disease or cirrhosis due to alcohol is not common in general populations and primary care but very common among patients with coexisting AUD. Targeted interventions for liver disease such as case finding will be more effective in at-risk populations, the researchers say.

Source: Amonker S, Houshmand A, Hinkson A, Rowe I, Parker R. Prevalence of alcohol-associated liver disease: a systematic review and meta-analysis. *Hepatol Commun.* 2023 Apr 26;7(5):e0133. doi.org/10.1097/HC9.000000000000133.

## Change in habitual intakes of flavonoid-rich foods and mortality in US males and females

Higher baseline intakes of flavonoid-rich foods and beverages are associated with a lower risk of chronic disease and mortality in observational studies. However, associations between changes in intakes and mortality remain unclear. A team of researchers evaluated associations between 8-year changes in intakes of (1) individual flavonoid-rich foods and (2) a composite measure (termed the 'flavodiet') of foods and beverages that are known to be main contributors to flavonoid intake and subsequent total and cause-specific mortality.

Associations between 8-year changes in intakes of (1) individual flavonoid-rich foods and (2) a novel 'flavodiet' score and total and cause-specific mortality were evaluated. The analysis included 55,786 females from the Nurses' Health Study (NHS) and 29,800 males from the Health Professionals Follow-up Study (HPFS), without chronic disease at baseline. The associations of 8-year changes in intakes of (1) flavonoid-rich foods and (2) the flavodiet score with subsequent 2-year lagged 6-year risk of mortality adjusting for baseline intakes were estimated.

There were 15,293 deaths in the NHS and 8,988 deaths in HPFS between 1986 and 2018. For

blueberries, red wine and peppers, a 5%, 4% and 9% lower risk of mortality, respectively, was seen for each 3.5 servings/week increase in intakes while for tea, a 3% lower risk was seen for each 7 servings/week increase [Pooled HR (95% CI) for blueberries; 0.95 (0.91, 0.99); red wine: 0.96 (0.93, 0.99); peppers: 0.91 (0.88, 0.95); and tea: 0.97 (0.95, 0.98)]. Conversely, a 3.5 servings/week increase in intakes of onions and grapefruit plus grapefruit juice was associated with a 5% and 6% higher risk of total mortality, respectively. An increase of 3 servings per day in the flavodiet score was associated with an 8% lower risk of total mortality [Pooled HR: 0.92 (0.89, 0.96)], and a 13% lower risk of neurological mortality [Pooled HR: 0.87 (0.79, 0.97)], after multivariable adjustments.

Encouraging an increased intake of specific flavonoid-rich foods and beverages, namely tea, blueberries, red wine, and peppers, even in middle age, may lower early mortality risk, the authors conclude.

Source: Bondonno NP, Liu YL, Zheng Y, Ivey K, Willett WC, Stampfer MJ, Rimm EB, Cassidy A. Change in habitual intakes of flavonoid-rich foods and mortality in US males and females. *BMC Med.* 2023 May 12;21(1):181. doi.org/10.1186/s12916-023-02873-z.

## Medical research listed by publication date

- Alcohol consumption and breast cancer prognosis after breast cancer diagnosis: a systematic review and meta-analysis of the Japanese Breast Cancer 08/04/2023
- Fatty liver disease, metabolism and alcohol interplay: A comprehensive review 23/04/2023
- Prevalence of alcohol-associated liver disease: a systematic review and meta-analysis 26/04/2023
- Alcohol consumption and the risk of heart failure: the Suita Study and metaanalysis of prospective cohort studies 02/05/2023
- Study of cardiovascular risks in adolescents (ERICA): alcohol consumption and associated factors 08/05/2023
- Change in habitual intakes of flavonoid-rich foods and mortality in US males and females 12/05/2023
- Polyphenol intake and mortality: A nationwide cohort study in the adult population of Spain 29/05/2023
- Review of alcohol as a modifiable risk factor for Alzheimer's disease-evidence from experimental studies 30/05/2023
- Burden of high-risk phenotype of heavy alcohol consumption among obese U.S. population: results from National Health and Nutrition Examination Survey, 1999–2020 30/05/2023
- Habitual adherence to a traditional Mediterranean diet and risk of SARS-CoV-2 infection and Coronavirus disease 2019 (COVID-19): a longitudinal analysis 01/06/2023
- Alcohol consumption and all-cause and cause-specific mortality among US adults 07/06/2023
- Associations of habitual alcohol drinking with HDL cholesterol and D-dimer in patients with peripheral arterial disease Available online 08/06/2023, Version of Record 15 /06/2023
- Association of alcohol consumption with cognition in older population 13/06/2023

## Evaluating the effects of minimum unit pricing in Scotland on the prevalence of harmful drinking: a controlled interrupted time series analysis

In May 2018, the Scottish Government introduced a minimum unit price (MUP) for alcohol of £0.50 (1 UK unit = 8g ethanol) to reduce alcohol consumption, particularly among people drinking at harmful levels. A study aimed to evaluate MUP's impact on the prevalence of harmful drinking among adults in Scotland.

This was a controlled interrupted monthly time series analysis of repeat cross-sectional data collected via 1-week drinking diaries from adult drinkers in Scotland (N = 38,674) and Northern England (N = 71,687) between January 2009 and February 2020.

The primary outcome was the proportion of drinkers consuming at harmful levels (>50 [men] or >35 [women] units in diary week). The secondary outcomes included the proportion of drinkers consuming at hazardous ( $\geq 14$ -50 [men] or  $\geq 14$ -35 [women] units) and moderate (<14 units) levels and measures of beverage preferences and drinking patterns. Analyses also examined the prevalence of harmful drinking in key subgroups.

There was no significant change in the proportion of drinkers consuming at harmful levels ( $\beta = +0.6$  percentage points; 95% confidence interval [CI] = -1.1, +2.3) or moderate levels ( $\beta = +1.4$  percentage points; 95% confidence interval = -1.1, +3.8) after the introduction of MUP. The proportion consuming at hazardous levels fell significantly by 3.5 percentage points (95% CI = -5.4, -1.7). There were no significant changes in other secondary outcomes or in the subgroup analyses after correction for multiple testing.

Introducing MUP in Scotland was not associated with reductions in the proportion of drinkers consuming at harmful levels but did reduce the prevalence of hazardous drinking. This adds to previous evidence that MUP reduced overall alcohol consumption in Scotland and consumption among those drinking above moderate levels.

Source: Stevely AK; Mackay D; Alava MH; Brennan A; Meier PS; Sasso A; Holmes J, 'Evaluating the effects of minimum unit pricing in Scotland on the prevalence of harmful drinking: a controlled interrupted time series analysis', *Public Health*, Vol 220, 2023, pp43-49 [R187437] doi.org/10.1016/j.puhe.2023.04.019

## Digital interventions to moderate alcohol consumption in young people: a Cancer Prevention Europe overview of systematic reviews

Strategies to reduce alcohol consumption would contribute to substantial health benefits in the population, including reducing cancer risk, according to the authors of a study in *Frontiers in Digital Health*. The increasing accessibility and applicability of digital technologies make these powerful tools suitable to facilitate changes in behaviour in young people which could then translate into both immediate and long-term improvements to public health.

A review was conducted of the available evidence on digital interventions aimed at reducing alcohol consumption in sub-populations of young people [school-aged children, college/university students, young adults only (over 18 years) and both adolescent and young adults (<25 years)].

Twenty-seven systematic reviews were included that addressed relevant interventions in one or more of the sub-populations, but those reviews were mostly assessed as low quality. Definitions of “digital intervention” greatly varied across systematic reviews. Available evidence was limited both by sub-population and type of intervention. No reviews reported cancer incidence or influence on cancer related outcomes.

In school-aged children eHealth multiple health behaviour change interventions delivered through a variety of digital methods were not effective in preventing or reducing alcohol consumption with no effect on the prevalence of alcohol. While in adolescents and/or young adults who were identified as risky drinkers, the use of computer or mobile device-based interventions resulted in reduced alcohol consumption when comparing the digital intervention with no/minimal intervention (−13.4 g/week, 95% CI: −19.3 to −7.6, review rated low RoB, moderate to substantial heterogeneity). In University/College students, a range of E-interventions reduced the number of drinks consumed per week compared

to assessment only controls although the overall effect was small. Web-based personalised feedback interventions demonstrated a small to medium effect on alcohol consumption. In risky drinkers, stand-alone Computerized interventions reduced short- and long-term alcohol consumption compared to no intervention, while a small effect (SMD: −0.15, 95% CI: −0.25 to −0.06) in favour of computerised assessment and feedback vs. assessment only was observed. No short-term or long-term effect was demonstrated for computerised brief interventions when compared to counsellor-based interventions (review rated low RoB, minimal to considerable heterogeneity). In young adults and adolescents, SMS-based interventions did not significantly reduce the quantity of drinks per occasion from baseline or the average number of standard glasses per week but increased the risk of binge drinking episodes.

Limited evidence suggests some potential for digital interventions, particularly those with feedback, in reducing alcohol consumption in certain sub-populations of younger people. However, this effect is often small, inconsistent or diminishes when only methodologically robust evidence is considered. There is no systematic review evidence that digital interventions reduce cancer incidence through alcohol moderation in young people. The study authors comment that to reduce alcohol consumption, a major cancer risk factor, further methodologically robust research is warranted to explore the full potential of digital interventions and to form the basis of evidence based public health initiatives.

Source: McDermott KT, Noake C, Wolff R, Espina C, Foucaud J, Steindorf K, Schüz J, Thorat MA, Weijenberg M, Bauld L, Kleijnen J. Digital interventions to moderate alcohol consumption in young people: a Cancer Prevention Europe overview of systematic reviews. *Front Digit Health*. 2023 May 23;5:1178407. doi.org/10.3389/fdgth.2023.

## Alcohol use in the cost-of-living crisis

Thu, 22 Jun 2023 14:00 - 15:00 BST

The cost-of-living crisis has pushed many households into poverty, but what does this mean for the nation's health?

Join the Institute of Alcohol Studies and Director of Public Health for Gateshead, Alice Wiseman, to hear from Dr Philip Broadbent (Specialty Registrar

in Public Health Medicine) and Holly Wood (With You) on how the cost-of-living crisis is impacting public health, particularly in relation to levels of alcohol harm.

[eventbrite.co.uk/e/alcohol-use-in-the-cost-of-living-crisis-tickets-637954748827](https://eventbrite.co.uk/e/alcohol-use-in-the-cost-of-living-crisis-tickets-637954748827)

## Improving alcohol health literacy and reducing alcohol consumption: recommendations for Germany

Although the detrimental health effects of alcohol are well established, consumption levels are high in many high-income countries such as Germany. Improving alcohol health literacy presents an integrated approach to alcohol prevention and an important complement to alcohol policy. A study aimed to identify and prioritise measures to enhance alcohol health literacy and hence to reduce alcohol consumption, using Germany as an example.

A series of recommendations for improving alcohol health literacy were derived from a review of the literature and subsequently rated by five experts. Recommendations were rated according to their likely impact on enhancing (a) alcohol health literacy and (b) reducing alcohol consumption.

Eleven recommendations were established for three areas of action: (1) education and information,

(2) health care system, and (3) alcohol control policy. Education and information measures were rated high to increase alcohol health literacy but low to their impact on alcohol consumption, while this pattern was reversed for alcohol control policies.

Improving alcohol health literacy and reducing alcohol consumption should be considered complementary and become part of a comprehensive alcohol strategy to curb the health, social, and economic burden of alcohol the researchers say.

Source: Manthey J, Kokole D, Riedel-Heller S, Rowlands G, Schäfer I, Schomerus G, Soellner R, Kilian C. Improving alcohol health literacy and reducing alcohol consumption: recommendations for Germany. *Addict Sci Clin Pract.* 2023 May 9;18(1):28. doi.org/10.1186/s13722-023-00383-0.

## The mediating effect of food choice upon associations between adolescent health-related quality of life and physical activity, social media use and abstinence from alcohol

Understanding how health-related quality of life (HRQoL) is related to lifestyle factors during adolescence is crucial to effective health promotion. An analysis aimed to identify associations between HRQoL and lifestyle and to determine the degree to which they are mediated by food choices in adolescents.

The Wellbeing in Schools (NI) survey, which included 1,609 teenagers aged 13–14 years, assessed HRQoL. Food choice was assessed by Food Frequency Questionnaire (FFQ) and physical activity was assessed using the Physical Activity Questionnaire for Adolescents (PAQ-A). Social media and alcohol abstinence were self-reported.

Path analysis indicated that fruit and vegetable intake was associated with higher HRQoL on dimensions of moods and emotions, parent relations and home life, financial resources, and social support and peers. Bread and dairy intake was related to higher physical wellbeing. Protein was associated with higher psychological wellbeing, moods and emotions, self-perception, parent relations and home life, financial resources, and lower social support and peers. Junk food

was related to lower moods and emotions. Males had higher psychological wellbeing, moods and emotions, parental relations and home life. Females had higher self-perception, autonomy, and social support and peers. Greater physical activity explained higher HRQoL on all dimensions. Less social media was associated with higher psychological wellbeing, moods and emotions, self-perception, parent relations and home life, and school environment. Alcohol abstinence was associated with higher physical wellbeing, psychological wellbeing, moods and emotions, self-perception, parent relations and home life, and school environment dimensions.

Intervention to promote HRQoL in adolescents should consider food choices whilst encouraging physical activity, discouraging social media and deterring alcohol, and targeting boys and girls separately, the authors comment.

Source: Davison J, Bunting B, Stewart-Knox B. The mediating effect of food choice upon associations between adolescent health-related quality of life and physical activity, social media use and abstinence from alcohol. *Health Qual Life Outcomes.* 2023 May 18;21(1):46. doi.org/10.1186/s12955-023-02129-7

## Following social media influencers who share alcohol-related content is associated with college drinking

Frequent exposure to peer-shared alcohol-related content (ARC) on social media is associated with greater alcohol consumption and related consequences among undergraduates. Social media influencers also share ARC; yet the effect of exposure to influencer-shared ARC on alcohol outcomes has not been examined. A study examined whether following influencers who share ARC and the frequency of sharing were associated with alcohol outcomes, and associations between influencer type (e.g., actors) and alcohol outcomes. 528 Undergraduates from two universities in the United States completed an online survey assessing demographics, social media use, alcohol use and related consequences. They listed up to five influencers they followed and viewed the most content from.

The research found that having a larger proportion of influencers sharing ARC was associated with greater quantity, frequency and peak drinks,

but not consequences. Frequency of influencers sharing ARC was associated with greater quantity and peak drinks, but not frequency or consequences. Findings remained significant, even after controlling for peer ARC. Actor ARC, everyday person ARC and 'other' type influencer ARC were associated with several alcohol outcomes.

This study adds to the literature by examining how following influencers who share ARC, and sharing frequency, were associated with drinking outcomes over and above exposure to peer ARC. It also examined whether ARC content from specific types of influencers was associated with alcohol outcomes. Findings highlight that the source of ARC is relevant when studying the effects of ARC exposure on college drinking.

Source: Strowger, M, Ayala Guzman, R, Geyer, RB, Ward, RM, Braitman, AL. Following social media influencers who share alcohol-related content is associated with college drinking. *Drug Alcohol Rev.* 2023. doi.org/10.1111/dar.13694

## The association of influencer marketing and consumption of non-alcoholic beer with the purchase and consumption of alcohol by adolescents

A study by researchers in Taiwan examined influencer marketing and consumption of non-alcoholic beer by adolescents to determine how these factors could affect the intentions of adolescents to purchase and drink alcohol.

3,121 high-school students were recruited from 36 schools in Taiwan and completed a self-administered questionnaire during the COVID-19 pandemic in 2022. The results indicate that 19% of these adolescents consumed non-alcoholic beer and 28% consumed alcohol in the past year. Adolescents' exposure to influencer marketing was positively associated with their purchase and consumption of non-alcoholic beer. Adolescents' exposure to influencer marketing of non-alcoholic beer combined with lower levels of parental restrictive mediation was associated with increased odds of the purchase and consumption of alcohol. For individuals who did not purchase alcohol in

the past year, both the exposure to influencer marketing and the consumption of non-alcoholic beer were associated with intending to purchase alcohol in the future. Similarly, individuals who previously abstained from the consumption of alcohol, both the exposure to influencer marketing and the consumption of non-alcoholic beer were associated with intending to consume alcohol.

The authors conclude that when adolescents were exposed to influencer marketing of non-alcoholic beer they were more likely to consume it, which resulted in an increased likelihood that they would then purchase and consume alcohol.

Source: Hou CY, Huang TF, Chang FC, Yu TE, Chen TY, Chiu CH, Chen PH, Chiang JT, Miao NF, Chuang HY. The Association of Influencer Marketing and Consumption of Non-Alcoholic Beer with the Purchase and Consumption of Alcohol by Adolescents. *Behav Sci (Basel).* 2023 May 3;13(5):374. doi.org/10.3390/bs13050374.

## Drinking behaviors of Chinese adolescents over the past three decades: a systematic review and meta-analysis

China is home to the world's second largest youth population, but relatively little is known about adolescent drinking behaviours. A study examined prevalence rates and sex and age differences in drinking behaviours among Chinese adolescents over the past three decades and assessed whether underage drinking declined following the enactment of a strict national underage drinking policy in 2006.

Literature search was conducted in one Chinese and five English databases, with a total of 186 studies being included in the meta-analyses, examining lifetime, past month, past year, and weekly drinking; lifetime, past year, and past month drunkenness; past month binge drinking, and age at first drinking ( $\leq 13$  years).

Males reported higher prevalence on all drinking behaviours except for weekly drinking and

past month drunkenness. High school students reported higher prevalence in lifetime drinking, past year drunkenness, and lifetime drunkenness, than middle school students. No measured drinking behaviour showed a significant or reliable decline after 2006.

The findings suggest that prevalence rates of drinking behaviours remain high among Chinese adolescents but are lower than among European or North American adolescents. The 2006 Chinese national policy to reduce underage drinking did not measurably alter patterns of underage drinking. Implications for prevention, research, and policy are discussed.

Source: Zheng Y, Li J, Vergunst F. Drinking behaviors of Chinese adolescents over the past three decades: A systematic review and meta-analysis. *Prev Med.* 2023 May 31;173:107558. doi.org/10.1016/j.ypmed.2023.107558

## Understanding youth drinking decline: Similarity and change in the function and social meaning of alcohol use (and non-use) in adolescent cohorts 20 years apart

Qualitative research aimed at understanding the decline in youth drinking has so far been hampered by a lack of baseline data for comparison. This New Zealand study overcomes this limitation by comparing archival qualitative data collected at the height of youth drinking (1999–2001) with contemporary data collected for this study (June–October 2022). The aim is to explore changes in the function and social meaning of alcohol use (and non-use) for two cohorts about 20 years apart.

Both archival and contemporary data were collected from 14 to 17 year old secondary school students (years 10–12) through individual and small-group/pair interviews in matched suburban co-ed schools. Interviews explored friendships, lifestyles, romantic relationships and experiences and perceptions of substance use and non-use.

Comparative analysis highlighted changes that may help to explain the decline in youth drinking, including an increased value placed on personal

choice and acceptance of diversity; decreased face-to-face socialising and the emergence of social media as a central feature of adolescent social life, perhaps displacing key functions of drinking and partying; increased pervasiveness of risk discourses and increased awareness of health and social risks of alcohol; and increased framing of alcohol use as a coping mechanism by both drinkers and non-drinkers.

The authors conclude that collectively, these changes appear to have shifted the social position of drinking from an almost compulsory component of adolescent social life in 1999–2001, to an optional activity that many contemporary adolescents perceive to have high risks and few benefits.

Source: Ball, J, Pettie, MA, Poasa, L, Abel, G. Understanding youth drinking decline: Similarity and change in the function and social meaning of alcohol use (and non-use) in adolescent cohorts 20 years apart. *Drug Alcohol Rev.* 2023. doi.org/10.1111/dar.13685

## Situated Drinking: The association between eating and alcohol consumption in Great Britain

A paper published in the journal, *Nordic Studies on Alcohol and Drugs*, examined the co-occurrence of drinking alcohol and eating in Great Britain. Applying a practice-theoretical framework, the study asked whether drinking events involving food are significantly different from those without, whether differences are the same at home as on commercial public premises, and whether differences are the same for men and women. The focus was especially on episodes of drinking with meals at home, an infrequently explored context for a substantial proportion of contemporary alcohol consumption.

Employing a secondary analysis of commercial data about the British population in 2016, the researchers examined reports of 47,645 drinking events, on commercial premises and at other locations, to explore how eating food and consumption of alcoholic beverages affect one another. Three types of event were compared – drinking with meals, with snacks, and without

any food. Variables describing situations include group size and composition, temporal and spatial parameters, beverages, purposes, and simultaneous activities. Basic sociodemographic characteristics of respondents are also examined, with a special focus on the effects of gender.

Behaviours differ between settings. The presence of food at a drinking episode is associated with different patterns of participation, orientations, and quantities and types of beverage consumed. Gender, age, and class differences are apparent.

Patterns of alcohol consumption are significantly affected by the accompaniment of food. This is a much-neglected topic that would benefit from further comparative and time series studies to determine the consequences for behaviour and intervention, the authors argue.

Source: Warde A, Sasso A, Holmes J, Hernández Alava M, Stevely AK, Meier PS. Situated drinking: The association between eating and alcohol consumption in Great Britain. *Nordisk Alkohol Nark*. 2023 Jun;40(3):301-318. doi.org/10.1177/14550725231157222.

## Cask wine: Describing drinking patterns associated with Australia's cheapest alcohol

In Australia, cask wine is the cheapest alcoholic beverage available, offering the lowest price per standard drink. Despite this, there is little research on the contextual correlates of cask wine consumption. A study described how cask wine consumption has changed over the last decade and, through comparisons between cask and bottled wine, how prices, typical drinking locations, and patterns of consumption differ between the beverages.

The research used four waves of the National Drug Strategy Household Survey (2010, 2013, 2016 and 2019) in order to examine consumption trends over time. The International Alcohol Control study (2013) in Australia was additionally used to explore pricing and consumption trends in greater detail.

Cask wine was considerably cheaper than other forms of wine at \$0.54 per standard drink (95% confidence interval [CI] 0.45–0.62). Consumption

trends associated with cask wine differed from that of bottled wine, being consumed almost entirely at home and in significantly greater quantity (standard drinks per day 7.8, 95% CI 6.25–9.26). Among the heaviest drinkers, 13% (95% CI 7.2–18.8) consumed cask wine as their main drink, compared to 5% (95% CI 3.76–6.24) consuming bottled wine.

The authors conclude that cask wine drinkers are disproportionately more likely to consume higher amounts of alcohol, paying less per drink doing so compared to bottled wine drinkers. As all cask wine purchases were under \$1.30, a minimum unit price may have a much larger effect on cask wine purchases, applying to a far smaller proportion of bottled wine.

Source: Torney, A, Room, R, Callinan, S. Cask wine: Describing drinking patterns associated with Australia's cheapest alcohol. *Drug Alcohol Rev*. 2023. doi.org/10.1111/dar.13684

## Adolescent binge drinking in the West of Ireland: associated risk and protective factors

The authors of a study published in BMC Public Health examined the potential risk and protective factors for binge drinking among 15–16-year-old adolescents in the West of Ireland. This is of importance, as harmful patterns of alcohol consumption, such as binge drinking, may emerge during adolescence and become established.

This was a cross-sectional secondary analysis of 4,473 participants from the Planet Youth 2020 Survey. The outcome was ever binge drinking, defined as ever consumption of five or more drinks in a two-hour period or less. Independent variables were selected a priori following review of peer-reviewed literature and were grouped as individual, parents and family, peer group, school, leisure time and local community factors.

The prevalence of ever binge drinking was 34.1%. Self-rated 'bad/very bad' mental health (adjusted Odds Ratio (aOR) 1.61, 95% CI 1.26–2.06), current cigarette use (aOR 4.06, 95% CI 3.01–5.47) and current cannabis use (aOR 2.79, 95% CI 1.80–4.31) increased odds of ever binge drinking.

Parental supervision (aOR 0.80, 95% CI 0.73–0.88) and negative parental reaction to adolescent drunkenness (aOR 0.51, 95% CI 0.42–0.61) reduced odds of ever binge drinking. Getting alcohol from parents increased odds of ever binge drinking (aOR 1.79, 95% CI 1.42–2.25).

Adolescents with friends who drink alcohol had almost five times higher odds of ever binge drinking (aOR 4.59, 95% CI 2.65–7.94). Participating in team/club sports also increased odds of ever binge drinking (aOR 1.30, 95% CI 1.07–1.57 for 1–4 times/week, aOR 1.52, 95% CI 1.07–2.16 for  $\geq 5$  times/week).

The researchers state that the study identifies individual and social environment factors associated with adolescent binge drinking in the West of Ireland, which can inform intersectoral action to protect adolescents from alcohol-related harm.

Source: Kelly, C., Major, E., Durcan, M. et al. Adolescent binge drinking in the West of Ireland: associated risk and protective factors. *BMC Public Health* 23, 1064 (2023). doi.org/10.1186/s12889-023-15577-z

## Alcohol and pregnancy in American Indian and Alaska Native women

American Indian and Alaska Native communities have diverse cultures, histories, and contemporary experiences. Grouping them together masks the differences in health and lifestyle behaviours, chronic disease rates, and health outcomes among them. This is particularly true for data on drinking during pregnancy among American Indian and Alaska Native women.

A review article describes how generalising findings from data gathered from often small, geographically specific samples, combined with inferior research methodologies, has led to misunderstandings about drinking among preconceptional and pregnant American Indian and Alaska Native women.

A scoping review was conducted and a total of 19 relevant studies were identified for review. Methodologically (i.e., how data were collected), the researchers found most previous research on prenatal or preconceptional alcohol use with American Indian and Alaska Native women used retrospective data collection. The researchers

also assessed who data were collected from and noted two groups: studies that sampled higher-risk women and those that focused on American Indian and Alaska Native women in specific geographic areas. Restricting data collection to higher-risk American Indian and Alaska Native women or conducting small studies in specific geographic areas has generated an incomplete and inaccurate picture of American Indian and Alaska Native women as a whole as well as those who consume alcohol.

Data from select groups of American Indian and Alaska Native women may overestimate the true prevalence of drinking during pregnancy among this population. Updated and accurate data on drinking during pregnancy are urgently needed to inform the development of interventions and prevention efforts.

Source: Hanson JD, Sarche M, Buchwald D. Alcohol consumption and pregnancy in American Indian and Alaska Native women: A scoping review of the literature. *Womens Health (Lond)*. 2023 Jan-Dec;19:17455057231175799. doi.org/10.1177/17455057231175799.

## Predictors of beverage-specific, alcohol consumption trajectories: A Swedish population-based cohort study

A study examined whether changes in alcohol consumption over time differ according to beverage types, and to what extent socioeconomic, lifestyle and health-related factors predict beverage-specific trajectories in Sweden.

The research included participants from the Stockholm Public Health Cohort who were surveyed repeatedly in 2002, 2010 and 2014. Alcohol consumption trajectories were constructed for 13,152 individuals with valid information on amount and frequency of drinking. Preferred beverage types (i.e., beer, wine or spirits) were defined based on the most consumed beverages.

Overall, 56.9% of respondents were women, the mean age was 49.2 years, SD (13.1). Wine was cited as the preferred beverage for 72.4% of participants, and stable moderate drinking was the most common trajectory regardless of beverage type (68.2%, 54.9% and 54.2% in individuals with wine, beer and spirits as preferred beverages, respectively). Associations between

drinking trajectories and baseline lifestyle factors did not differ by beverage type. Lower socioeconomic position (SEP) was associated with unstable moderate wine drinking (for unskilled manual SEP: adjusted odds ratio [aOR] 1.54, 95% confidence interval [CI] 1.23, 1.93), unstable heavy beer drinking (for skilled manual SEP: aOR 1.99, 95% CI 1.14, 3.52; and unskilled manual SEP: aOR 1.72, 95% CI 1.05, 2.82), and former beer drinking trajectory (for skilled manual SEP: aOR 1.81; 95% CI 1.21, 2.72; and unskilled manual SEP: aOR 1.66; 95% CI 1.17, 2.37).

Lower SEP was associated with unstable heavy drinking of beer, former beer drinking, and unstable moderate wine drinking trajectories indicating that targeted alcohol prevention programmes need to focus on these groups.

Source: Sidorchuk A, Engström K, Möller J, Gémes K. Predictors of beverage-specific, alcohol consumption trajectories: A Swedish population-based cohort study. *Nordisk Alkohol Nark.* 2023 Jun;40(3):233-249. doi: [10.1177/14550725221124386](https://doi.org/10.1177/14550725221124386).

### Social research by date

- Predictors of beverage-specific, alcohol consumption trajectories: A Swedish population-based cohort study 11/04/2022
- The association between eating and alcohol consumption in Great Britain 02/21/2023
- The association of influencer marketing and consumption of non-alcoholic beer with the purchase and consumption of alcohol by adolescents 05/03/2023
- Improving alcohol health literacy and reducing alcohol consumption: recommendations for Germany 05/09/2023
- The mediating effect of food choice upon associations between adolescent health-related quality of life and physical activity, social media use and abstinence from alcohol 18/05/2023
- Alcohol consumption and pregnancy in American Indian and Alaska Native women 23/05/2023
- Digital interventions to moderate alcohol consumption in young people: a Cancer Prevention Europe overview of systematic reviews 23/05/2023
- Cask wine: Describing drinking patterns associated with Australia's cheapest alcohol 24/05/2023
- Understanding youth drinking decline: Similarity and change in the function and social meaning of alcohol use (and non-use) in adolescent cohorts 20 years apart 24/05/2023
- Following social media influencers who share alcohol-related content is associated with college drinking 29/05/2023
- Drinking behaviors of Chinese adolescents over the past three decades: a systematic review and meta-analysis 30/05/2023
- Evaluating the effects of minimum unit pricing in Scotland on the prevalence of harmful drinking: a controlled interrupted time series analysis 31/05/2023 Version of Record 31 May 2023
- Adolescent binge drinking in the West of Ireland: associated risk and protective factors 06/06/2023

## Portman Group reviews particular appeal to under-18s Code rule

The Portman Group has launched a consultation reviewing Code rule 3.2(h) on particular appeal to under-18s in the Naming, Packaging and Promotion of Alcoholic Drinks Code (Code).

The consultation, which closes on 7 July, seeks views on proposed changes to the wording of Code rule 3.2(h), following an issue that has arisen in the daily application of the Code and to ensure alignment with the Portman Group's Alcohol Sponsorship Code. The proposed change to the Code rule adds the following text: "A producer must not allow the placement of brand names, logos or trademarks on merchandise which has a particular appeal to under-18s or is intended for use primarily by under-18s." Consultation respondents are invited to give their views on whether the Code rule should be changed and if they agree with the proposed wording.

Since the Code was launched in 1996, nearly a third (30%) of all cases considered by the Independent Complaints Panel (Panel) have been under Code rule 3.2(h); and since 2018, more cases have been considered under this rule than any other. The Code, which has undergone six reviews since

its launch, ensures that alcohol is promoted in a socially responsible way, only to those aged 18 and over, and in a way that does not appeal particularly to those who are vulnerable.

Matt Lambert, CEO of the Portman Group said: "Self-regulation is at its most effective when it enables robust, proportionate action quickly and in a way that also allows the views of all interested parties to be heard.

"This consultation seeks to address an issue the Portman Group identified following a complaint. While a technical breach did not occur, we believe it is appropriate to tighten the wording of Code rule 3.2(h) to prevent any marketing from creating a link between alcohol and products intended for or with particular appeal to children.

"I look forward to seeing the responses to this consultation so that the regulation of alcohol marketing remains fit for purpose and ensures that alcohol is promoted in a socially responsible way."

[portmangroup21.wpenginepowered.com/wp-content/uploads/2023/05/Portman-Group-Code-Rule-3.2h-Consultation-1.pdf](http://portmangroup21.wpenginepowered.com/wp-content/uploads/2023/05/Portman-Group-Code-Rule-3.2h-Consultation-1.pdf)

## Call for 0% alcohol products to have different branding to their alcoholic alternatives in Ireland

There has been a call for 0% alcohol products such as beers to have different branding to their alcoholic alternatives.

The CEO of Alcohol Action Ireland has said there is a "proliferation of zero-alcohol products" being advertised in settings such as on public transport and that it is in contravention of regulations under the Public Health Alcohol Act.

Speaking on RTÉ's This Week, Sheila Gilheany said Alcohol Action Ireland wants companies to be banned from what's known as "brand sharing" - a process that the advocacy group claims allows zero-alcohol drinks to use the same branding as their alcoholic alternatives for advertising purposes.

Ms Gilheany said the Health Service Executive (HSE) is the body which has responsibility for enforcing that legislation and believes it should be taking action. She also argued that if there is an issue with the legislation it needs to be amended. "If there is some problem, maybe if the legislation isn't clear

enough, then in that case we would be saying to Stephen Donnelly, the Minister for Health, that we should look again at that legislation and make it explicit.

However, the Director of Drinks Ireland has rejected any suggestion that the alcoholic drinks industry in Ireland is attempting to circumvent the Public Health Alcohol Act in the way it advertises zero-alcohol drinks.

## John Barker, elected new OIV DG

The 21st OIV general assembly, meeting in Jerez De La Frontera, Spain, has elected Dr John Barker, from New Zealand, on Friday 9 June 2023.

John Barker, PhD, was elected with 139,4 of the total 142,8 weighed votes. 46 out of 47 eligible Member States have voted for him. The new DG will start his mandate in January 2024, the "International Year of Vine and Wine" and when the organisation celebrates its centenary.

## Brexit impact on illicit trade of drugs, alcohol, and tobacco has implications for health

A new report from Public Health Wales has detailed how attention is urgently needed to understand the impacts of Brexit on illicit trade in Wales to mitigate potential health harms and deaths linked to illicit drugs, alcohol, and tobacco. The main ways that Brexit has changed international collaboration to tackle illicit trade is through:

- **Data and information sharing:** The UK does not have the same access to several EU databases for identifying criminals and illicit activity across Europe as it did before Brexit, potentially reducing its ability to detect and prevent illicit trade in the UK and Wales.
- **Border and import controls:** Now that the UK sits outside of the EU, it no longer participates in the Single Market or Customs Union. This could be advantageous for tackling illicit trade if goods are subject to additional checks at UK borders. However, new international trade agreements and proposals for free ports in the UK and Wales may create new opportunities that criminals will seek to exploit to smuggle illicit goods into Wales and the UK.
- **Supply and demand:** Post-Brexit, the UK is negotiating new international trade agreements, which have the potential to create new supply routes and opportunities for criminal exploitation. Brexit also has the potential to shape the demand for illicit drugs, alcohol, and tobacco in the UK and Wales by increasing risk of unemployment in sectors highly exposed to trade and poorer mental health due to uncertainty and a feeling of not being in control; all risk factors for increased consumption and/or misuse.

Dr Louisa Petchey, Senior Policy Specialist in the WHO Collaborating Centre at Public Health Wales, said: "Drug deaths have reached their highest ever levels in Wales. Alcohol deaths are also worryingly high, and smoking remains the leading cause of preventable death in Wales. This makes the detection and prevention of illicit trade in these goods vital.

"But there can be solutions. To effectively reduce the illicit trade of alcohol, tobacco, and drugs in the UK and Wales and benefit population health and well-being, strategies will need to reduce both the supply and demand of these goods, and

this will mean taking account of the potential impact of Brexit on both factors. This includes understanding its impact on supply chains, border controls, and law enforcement cooperation. It also means responding to the ways in which Brexit may have negatively impacted on health and well-being in Wales to decrease demand for these goods in the first place."

[phw.nhs.wales/news/brexit-impact-on-illicit-trade-of-drugs-alcohol-and-tobacco-has-implications-for-health/](https://phw.nhs.wales/news/brexit-impact-on-illicit-trade-of-drugs-alcohol-and-tobacco-has-implications-for-health/)

### THE IAS Publish their 3 year plan

In their report "Bringing together evidence and practice to reduce alcohol harm" the Institute of Alcohol Studies has published its strategy for 2023-2026.

Over the next three years, IAS will work to better understand and raise awareness of the issue of alcohol and inequalities. They will identify barriers to change, including activities of the alcohol industry, and work alongside like-minded organisations that share their goals to advocate for effective policy solutions that will reduce harm and promote equity

[ias.org.uk/wp-content/uploads/2023/06/IAS-Strategy-2023-2026.pdf](https://ias.org.uk/wp-content/uploads/2023/06/IAS-Strategy-2023-2026.pdf)

### Empowering wine professionals for responsible service

Following the launch of the Responsible Service Program at ProWein and Vinitaly, WiM undertook the 1st train-the-trainer session on May 30, 2023, at the Wine in Moderation office in Brussels.

Representatives from WiM's ambassador companies, national coordinators, and related organizations from Italy, Spain, Portugal, and France, gathered to learn about the Program with the intention of introducing it in their home country or company. The interactive training took the form of the nine modules, including wine-related legislation, social responsibility in business practices, and best practices in responsible wine service.

[wineinmoderation.eu/news/wim-holds-the-first-train-the-trainer-session-empowering-wine-professionals-for-responsible-service-and-sustainable-consumption](https://wineinmoderation.eu/news/wim-holds-the-first-train-the-trainer-session-empowering-wine-professionals-for-responsible-service-and-sustainable-consumption)

## What publicans think about policy, public health and the changing trade in the UK

Pubs are widely considered an important part of Britain's culture and heritage, a major source of employment and potentially provide a less harmful drinking environment compared to home drinking. As a result, supporting pubs is a policy objective for politicians of all parties. However, the number of UK pubs has been in decline since at least 1980, and closures have accelerated over the past decade.

Policies often proposed to help pubs, such as cutting alcohol tax, loosening licensing restrictions and relaxing the smoking ban, often run counter to evidence-based public health policies. However, publicans are rarely directly consulted in the policy process, typically represented by trade organisations that must balance their interests against those of other members, such as brewers.

The IAS spoke to publicans to better understand the opportunities and challenges they face, their policy priorities and to discover whether common ground can be found between the pub trade and

public health objectives. IAS commissioned CGA Strategy to survey a representative sample of 103 pub managers in February 2017. Key points from the report include:

- There is significant common ground between public health bodies and publicans, and scope to develop policies approved of by both groups.
- Many publicans are deeply concerned about harmful alcohol consumption.
- Both see cheap alcohol in supermarkets and off-licences as a major issue to be addressed.
- Minimum unit pricing is an obvious way to address these issues, and is favoured by publicans.
- Publicans are also willing to support other measures such as a lower drink drive limit that they do not think will have an excessive negative impact on their business.

[ias.org.uk/uploads/pdf/IAS%20reports/rp26092017.pdf](https://ias.org.uk/uploads/pdf/IAS%20reports/rp26092017.pdf)

## Ministers for Health bring into law the world's first comprehensive health labelling of alcohol products

In Ireland, the Minister for Health Stephen Donnelly has signed into law the Public Health (Alcohol) (Labelling) Regulations 2023 and the remaining provisions of Section 12 of the Public Health (Alcohol) Act.

Section 12 and the Labelling Regulations together introduce comprehensive health labelling of alcohol products sold in Ireland and ensures that similar health information will be available for customers in licensed premises.

The law requires that the labels of alcohol products will state the calorie content and grams of alcohol in the product. They will warn about the risk of consuming alcohol when pregnant and will also warn of the risk of liver disease and fatal cancers from alcohol consumption. The labels will direct the consumer to the Health Service Executive (HSE) consumer website, [www.askaboutalcohol.ie](http://www.askaboutalcohol.ie), for further information.

There is a three-year lead-in time built into the law in order to give businesses significant time to prepare for the change. The law will apply from 22 May 2026.

Minister Donnelly said: "This law is designed to give all of us as consumers a better understanding of the alcohol content and health risks associated with consuming alcohol. With that information, we can make an informed decision about our own alcohol consumption".

"Packaging of other food and drink products already contains health information and, where appropriate, health warnings. This law is bringing alcohol products into line with that."

Minister Donnelly concluded: "I welcome that we are the first country in the world to take this step and introduce comprehensive health labelling of alcohol products. I look forward to other countries following our example."

## Welsh government report on minimum pricing for alcohol 2 years after introduction

The Welsh government has published a report that provides an analysis of the Welsh minimum pricing journey so far.

The policy was introduced by the Labour Welsh Government in 2019 to help people drink responsibly. The report finds that:

- There is an emerging data story to be told about Welsh MPA introduction. This is not a straightforward cause and effect story, rather a nuanced and detailed one of a complex landscape.
- The policy implementation has been broadly welcomed and accompanied with high levels of retail compliance.
- The Welsh MPA introduction appears to be offering some consistency with wider international expectations. Whilst also offering some specifics pertaining to the Welsh context.
- MPA in Wales has largely brought about the removal of cheap cider from the shops, with drinkers predominantly switching to strong lager, spirits or wine.
- Those most adversely affected by MPA appear to be dependent drinkers on low incomes.
- Any volume of feared expected negative impacts has not materialised.
- Understanding other potential impacts of MPA has been made more difficult by other factors, notably COVID-19 and the emergent cost of living crisis experienced by many.

- Regard now needs to be given to the potential price level to maintain any observed impacts and ensuring the availability of treatment and other (financial-related) support to dependent drinkers on low incomes.

Welsh Conservatives have claimed that Wales' minimum alcohol unit pricing policy has failed with the number of people dying from alcohol related deaths increasing since it was brought in, but a Welsh Government spokesperson said: "We introduced a minimum unit price for alcohol as one tool to help reduce alcohol related harm, address health issues and support people to drink responsibly.

"Whilst it is too early to conclude on the effectiveness of the policy, the interim report published today shows retailers were seeing a reduction in customers purchasing low-cost, high-strength alcoholic products.

"Whilst it will take a number of years to see the health related benefits, this is a positive step towards reducing alcohol related harm."

The Welsh Government also said it has increased its spending to tackle substance misuse, including alcohol misuse, to £67m this year and will increase this again by £2m in 2024.

[gov.wales/sites/default/files/statistics-and-research/2023-06/24-month-review-of-the-introduction-of-minimum-pricing-for-alcohol-in-wales.pdf](https://gov.wales/sites/default/files/statistics-and-research/2023-06/24-month-review-of-the-introduction-of-minimum-pricing-for-alcohol-in-wales.pdf)

## Lessons from the Baltic Alcohol Control Policy Project: policies that contribute to decreasing burden of mortality and disease

A short brief from the World Health Organization (WHO) describes the main findings and the key lessons learned from the research project "Evaluation of the impact of alcohol control policies on morbidity and mortality in Lithuania and other Baltic states", funded by the United States National Institute on Alcohol Abuse and Alcoholism for the period 2000–2025.

The WHO-backed project aims to assess the effects of alcohol control policies implemented in Estonia, Latvia and Lithuania and to investigate the impact they have had on both people's health and the countries' economies, based on concrete actions taken.

The key findings of the project demonstrate that alcohol control policies such as taxation and availability measures decrease all-cause mortality and reduce inequalities, and that dismantling alcohol control policies has the opposite effect on population health. They also highlight that consumption of unrecorded alcohol will not necessarily go up if taxation is increased and that specific countermeasures can be taken to prevent an increase in unrecorded consumption.

[who.int/europe/publications/i/item/WHO-EURO-2023-7517-47284-69366](https://who.int/europe/publications/i/item/WHO-EURO-2023-7517-47284-69366)

## Public attitudes to and awareness of minimum pricing for alcohol in Wales

The Welsh government has published a further report on 6 June that examined public attitudes to and awareness of minimum pricing for alcohol in Wales.

The report found that there has been a growing awareness of minimum pricing for alcohol. Respondents identified as being at 'increasing and higher risk' were more likely to be aware of minimum pricing for alcohol than non-drinkers. Awareness of minimum pricing is significantly lower in those aged 16-34.

Alongside this growing awareness of minimum pricing, the 2014, the 2018 and 2020 survey also found that a greater proportion of respondents were in favour of the introduction of a minimum price for alcohol. In 2020 respondents were twice as likely to be in favour of minimum pricing than against (54% in favour and 25% were against).

It appears there has been an overall increase in support and a decrease in opposition since 2014.

When asked about perceptions of the effects of a minimum price for alcohol, the proportions agreeing with the statements that it would reduce crime or reduce problems of ill health remained relatively stable across the three surveys, with a greater proportion expecting it to reduce ill health than reduce crime. While a greater proportion of respondents still agree with statements on price increases not making any difference to the amount people drink and how much someone drinks being a personal choice with which government should not interfere, the proportion in agreement with these two statements has decreased between 2014 and 2020.

[gov.wales/sites/default/files/statistics-and-research/2023-05/public-attitudes-to-and-awareness-of-minimum-pricing-for-alcohol-in-wales-2018-2022.pdf](https://gov.wales/sites/default/files/statistics-and-research/2023-05/public-attitudes-to-and-awareness-of-minimum-pricing-for-alcohol-in-wales-2018-2022.pdf)

## WHO lobbying by alcohol companies called out

A group of 106 community and public health leaders from 60 countries have called on the World Health Organization (WHO) to stop its closed-door meetings with alcohol lobbyists, which allow companies that profit from alcoholic products to have unprecedented access to leaders who are responsible for advancing global health.

To coincide with the Seventy-sixth World Health Assembly, which is underway in Geneva, leading health advocates are calling out the secretive, annual invitation-only WHO meeting with alcohol company representatives. In a joint letter, leaders from organisations representing public health, community, family violence, children's rights and

First Nations groups called on WHO Director-General Dr Tedros Adhanom Ghebreyesus to stop engaging with alcohol lobbyists.

"Alcohol companies should not have a seat at the table where policy and programs to progress community health, wellbeing and safety is being developed, assessed or evaluated," the letter said. "The health, wellbeing and safety of our families and communities is far too important."

Alcohol companies' repeated efforts to undermine public health reforms have been observed and around the world.

[fare.org.au/106-community-leaders-call-on-world-health-organization-to-stop-closed-door-meetings-with-alcohol-lobbyists/](https://fare.org.au/106-community-leaders-call-on-world-health-organization-to-stop-closed-door-meetings-with-alcohol-lobbyists/)

## ADF advice for parents and carers

The Alcohol Drug Foundation in Australia has published an article aimed at parents on providing alcohol to under 18s. It gives information on the Australian drinking guidelines and statistics on under 18s who consume alcohol. The



article also defines what secondary supply is and explains secondary supply laws as well as state and territory laws.

Earlier this year the ADF also published its 'Talk About It' guide which gives help and support to parents for having open conversations about alcohol and other drugs with young people.

[adf.org.au/insights/understanding-secondary-supply/cdn.adf.org.au/media/documents/ADF\\_MINI\\_BULLN\\_Youth\\_AOD-for\\_parents-web.pdf](https://adf.org.au/insights/understanding-secondary-supply/cdn.adf.org.au/media/documents/ADF_MINI_BULLN_Youth_AOD-for_parents-web.pdf)

## Apparent per capita alcohol consumption: national, state, and regional trends, 1977–2021

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) published a surveillance report on 1977–2021 apparent per capita alcohol consumption in the United States. It is the 37th in a series of consumption reports produced annually. Findings are based on alcoholic beverage sales data collected by the Alcohol Epidemiologic Data System (AEDS) from the States or from the National Alcohol Beverage Control Association and from various reports produced by beverage industry sources. Population data from the U.S. Census Bureau are used as denominators to calculate per capita rates.

The following are highlights from the current report, which updates consumption trends through 2021:

- Per capita consumption of ethanol from all alcoholic beverages combined in 2021 was 2.51 gallons, representing a 2.9% increase from 2020 and a 5.5% increase from 2019. This was

the largest two-year increase since 1969, when there was a 5.9% increase over two years.

- Between 2020 and 2021, changes in overall per capita ethanol consumption included increases in 37 States and the District of Columbia, decreases in 10 States, and no changes in 3 States.
- Analysis of overall per capita alcohol consumption by U.S. Census region between 2020 and 2021 indicated increases of 5.4% in the Northeast, 1.6% in the Midwest, 3.4% in the South, and 2.3% in the West.
- Beer consumption has continued to fall and wine consumption to increase. Since 1977, spirit consumption fell up to the late 90s, but have since climbed back to close to the 1977 level.

[pubs.niaaa.nih.gov/publications/surveillance120/CONS21.htm](https://pubs.niaaa.nih.gov/publications/surveillance120/CONS21.htm)

## New British Columbia awareness campaign sends tough message: alcohol causes cancer

Canada's new Low-Risk Alcohol Drinking Guidelines, released in January, say drinking alcohol increases the risk of developing breast, colon, rectum, mouth and throat, liver, esophagus, and larynx cancers. The new guidelines suggest women can imbibe a maximum two standard drinks per week and men can have three before negative health consequences occur.

British Columbia (B.C.) Cancer, in partnership with the British Columbia Health Ministry, is launching a public awareness campaign with the tag line "the proof speaks for itself." The "proof" is a play on alcohol potency and the evidence that alcohol causes some cancers.

Using graphics of beer cans and wine bottles, the posters say that in 2020, alcohol contributed to 2,500 colorectal cancers and was linked to 1,700 breast cancer cases.

Cheryl Peters, a senior scientist for cancer prevention at B.C. Cancer and B.C. Centre for Disease Control, said the agency wants people to fully understand the potential risks of drinking alcohol. "Almost everybody knows and trusts that smoking causes cancer, and almost everybody knows and trusts that UV radiation from the sun causes skin cancer," said Peters, "but they don't tend to know about these other links with really serious diseases like cancer."

## The minimum unit price of alcohol in the Northern Territory

In an attempt to reduce heavy alcohol consumption and related harms, the Northern Territory government set a floor price for alcohol in October 2018. This price was set at \$1.30 per unit of alcohol, 10 grams of pure alcohol or one standard drink. Two government evaluations and peer-reviewed research articles have directly examined the influence of the minimum unit price on alcohol consumption, and related harms

in the three years following its implementation. The National Drug and Alcohol Research Centre in Sydney have made available a presentation which discusses those findings, the difficulties of researching the minimum unit price, and what we do not know. Dr Nic Taylor made the presentation on Thursday, 25 May.

[ndarc.med.unsw.edu.au/resource/minimum-unit-price-alcohol-northern-territory](https://ndarc.med.unsw.edu.au/resource/minimum-unit-price-alcohol-northern-territory)

**AIM – Alcohol in Moderation was founded in 1991 as an independent not for profit organisation whose role is to communicate “The Responsible Drinking Message” and to summarise and log relevant research, legislation, policy and campaigns regarding alcohol, health, social and policy issues.**

### **AIM Mission Statement**

- To work internationally to disseminate accurate social, scientific and medical research concerning responsible and moderate drinking
- To strive to ensure that alcohol is consumed responsibly and in moderation
- To encourage informed and balanced debate on alcohol, health and social issues
- To communicate and publicise relevant medical and scientific research in a clear and concise format, contributed to by AIM’s Council of 20 Professors and Specialists
- To publish information via [www.alcoholinmoderation.com](http://www.alcoholinmoderation.com) on moderate drinking and health, social and policy issues – comprehensively indexed and fully searchable without charge
- To educate consumers on responsible drinking and related health issues via [www.drinkingandyou.com](http://www.drinkingandyou.com) and publications, based on national government guidelines enabling consumers to make informed choices regarding drinking
- To inform and educate those working in the beverage alcohol industry regarding the responsible production, marketing, sale and promotion of alcohol
- To distribute AIM Digest Online without charge to policy makers, legislators and researchers involved in alcohol issues
- To direct enquiries towards full, peer reviewed or referenced sources of information and statistics where possible
- To work with organisations, companies and associations to create programmes, materials or policies that communicate responsible alcohol consumption messages or work to reduce alcohol related harm.

### **AIM Social, Scientific and Medical Council**

**Professor R. Curtis Ellison MD - Chairman,**  
Professor of Medicine, Section of Preventive Medicine & Epidemiology, Boston University School of Medicine, Boston, MA, US

**Henk Hendriks PhD - Co-director**  
Independent consultant, Netherlands

**Creina S. Stockley PhD MBA - Co-director**  
Independent consultant and Adjunct Senior Lecturer in the School of Agriculture, Food and Wine at the University of Adelaide, Australia

**Professor Alan Crozier,** Research Associate, Department of Nutrition, UC Davis, US

**Harvey Finkel MD,** Clinical Professor of Medicine (Oncology and Haematology), Boston University School of Medicine, US

**Professor Adrian Furnham,** Professor in Psychology and occupational psychology, University College London, UK

**Giovanni de Gaetano, MD, PhD,** President, IRCCS Istituto Neurologico Mediterraneo NEUROMED, Pozzilli, Italy

**Tedd Goldfinger FACC, FCCP,** President, Desert Heart Foundation, Tucson, University of Arizona, US

**Lynn Gretkowski MD,** Obstetrics and Gynaecology, Faculty member Stanford University, US

**Professor Dwight B. Heath,** Anthropologist, Professor Emeritus of Anthropology, Brown University, US

**Professor OFW James,** Emeritus Professor of Hepatology, Newcastle University, UK

**Ellen Mack MD,** Oncologist

**Professor JM Orgogozo,** Professor of brain science, Institut de Cerveau, University of Bordeaux, France

**Stanton Peele PhD,** Social Policy Consultant, US

**Prof Susan J van Rensburg MSc, PhD,** Emeritus Associate Professor in the Division of Chemical Pathology, Tygerberg Hospital, University of Stellenbosch, South Africa

**Dr Erik Skovenborg,** Scandinavian Medical Alcohol Board

**Arne Svilaas MD, PhD,** Chief Consultant, Lipid Clinic, Oslo University Hospital, Oslo, Norway.

**Professor Pierre-Louis Teissedre, PhD,** Faculty of Oenology–ISVV, University Victor Segalen Bordeaux, France

**Dag Thelle MD, PhD,** Senior Professor of Cardiovascular Epidemiology and Prevention, University of Gothenburg, Sweden; Senior Professor of Quantitative Medicine at the University of Oslo, Norway

**David P van Velden MD,** Dept of Pathology, Stellenbosch University, Stellenbosch, South Africa

**David Vauzour PhD,** Senior Research Associate, Department of Nutrition, Norwich Medical School, University of East Anglia, Norwich, UK