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## Uganda

Uganda has banned the consumption and sale of alcohol in sachets in a move to protect public health. The small plastic packets of spirit up to 45% proof are cheap and appeal particularly to those on low income, but they are also purchased by school children. The spirit of can be mixed with other flavourings.

Currently Uganda has no written national alcohol policy, and very little regulation of alcohol availability and advertising. The ban is one of the few measures that Uganda is taking to try and curb alcohol abuse. The government has said that it is also working on a law to regulate home-brewed alcohol.

## Canada

New regulations restricting the amount of alcohol allowed in potent, sugary, premixed drinks took effect across Canada in May. Previously, a 568-millilitre can of premixed drink could contain up to 11.9 % alcohol by volume (abv), the equivalent of about four Canadian standard drinks. Under the new regulations, a drink of the same size can't contain more than 4.5 % abv.

The new regulations do not, however, address the labelling of these products and this has drawn criticism from some organisations. Health Minister Ginette Petitpas Taylor said the priority was to get sugary, premixed drinks with high alcohol content off the shelves.

## Oman

The Sultanate of Oman is preparing to introduce a 100% excise tax on alcohol, tobacco and energy drinks in a bid to tackle health issues in the region. Oman's introduction of the excise tax follows similar moves from other Gulf Cooperation Council countries, such as the UAE, Bahrain and Qatar.

The new law was issued on 13 March 2019. Once the new regulation comes into effect, excise tax will be payable at the production or import stage of each affected product.

## Bulgaria

In June, during a special operation as part of an EU-wide campaign by the European Network of Traffic Police, Tispol, Bulgarian Traffic Police checked 20,807 motorists and found 212 motorists driving over the legal blood-alcohol limit and 48 who had used narcotics.

In the previous operation in December 2018, 19,624 motorists were checked, with 204 found to be driving drunk and 42 having used illegal drugs. Bulgaria has the second-highest road death rate in the EU. Drink-driving is one of the major causes, along with speeding and reckless overtaking.

## Estonia

In May the Estonian government decided to decrease alcohol excise duties by 25%. The tax cuts are designed to halt and reverse cross-border alcohol trade in Latvia, where customers from Estonia and Finland have been traveling to make purchases. It is possible that Latvia will follow suit with similar duty decreases.



## Steps to Refine the “J-Shaped Curve”

R. Curtis Ellison, MD

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### Introduction

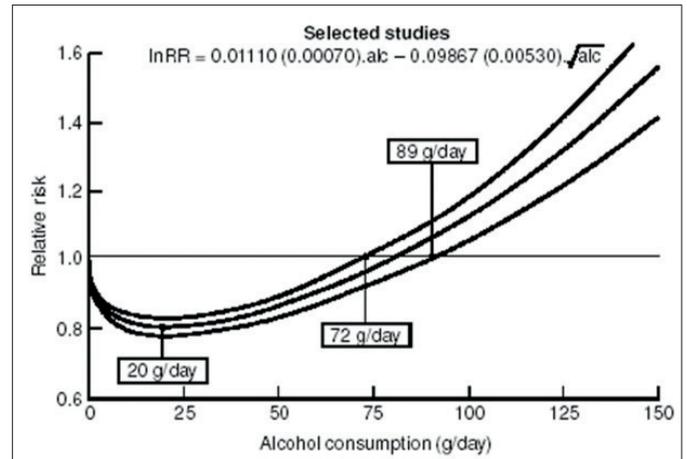
Epidemiologic studies for many decades have consistently shown that, when compared with non-drinkers, light-to-moderate consumers of alcoholic beverages have a lower risk of cardiovascular disease (CVD), and also show a reduced risk of total mortality. In most studies that contain an adequate number of heavy drinkers, such subjects show a greater risk than moderate drinkers as well as non-drinkers; this phenomenon results in what is known as a “J-shaped curve.”

While many of the early studies included ex-drinkers in the non-drinking referent group (that may have increased the risk of disease for “current abstainers”), a similar J-shaped curve has almost always been seen in more recent studies when only lifetime abstainers make up the non-drinking category. Numerous improvements in epidemiologic & statistical techniques, as well as better definition of potential confounders, have provided even clearer results from observational epidemiologic studies (Ronksley et al, 2011; Midlov et al, 2016). Randomized control trials in humans (Brien et al, 2011) and essentially all animal experiments have shown a similar pattern: beneficial effects on risk factors and disease with light-to-moderate alcohol exposure, adverse effects with large amounts; even when repeated estimates of alcohol intake are used to construct trajectories of consumption, Passos et al (2017) have recently shown a J-shaped curve between alcohol and CVD; and the opposite is seen when studying the quality of life: higher scores for subjects reporting moderate drinking and lower scores among both abstainers and those with heavy drinking (Schriecks et al, 2016).

### Differences between a linear and a J-shaped curve

Wikipedia defines a J-shaped curve as “A variety of J-shaped diagrams where a curve initially falls, then steeply rises above the starting point.” For the consumption of wine and other alcoholic beverages, this means a decline in risk (of heart disease, dementia, total mortality, etc.) for intake up to a certain level of drinking, a return to the same risk as non-drinkers with a little more alcohol,

and then an increase in risk for heavy drinking. For most middle-aged or older adults (unless there are contraindications to any alcohol from previous abuse, severe liver or certain other diseases, etc.) current scientific data indicate that the message in terms of health is “a little alcohol is good for you, a lot of alcohol is bad for you.”



Adapted from Carrao et al, 2000

### Focus on the data, not extrapolation of effect into levels with little or no data

The first important element when looking at J shaped curves, is that the overwhelming percentage of participants in studies drink one or two drinks a day, 87% consume < 12 g/day; almost none above 30 grams/day, which means the upper end of the curves reflect a extrapolation of effect into levels with little or no data.

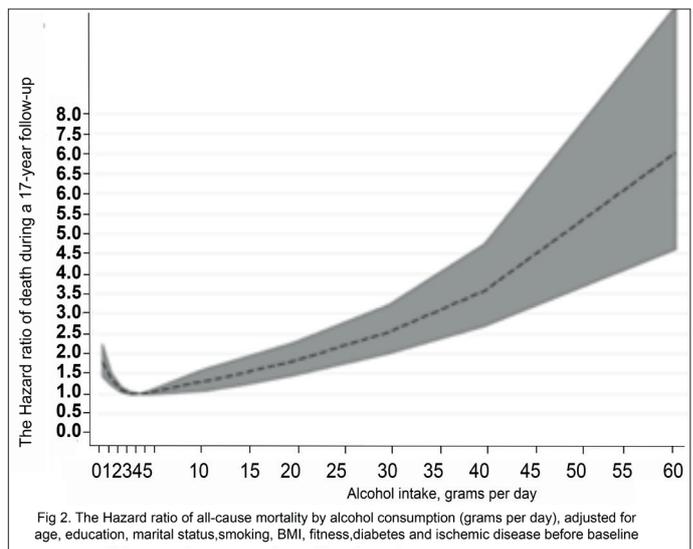
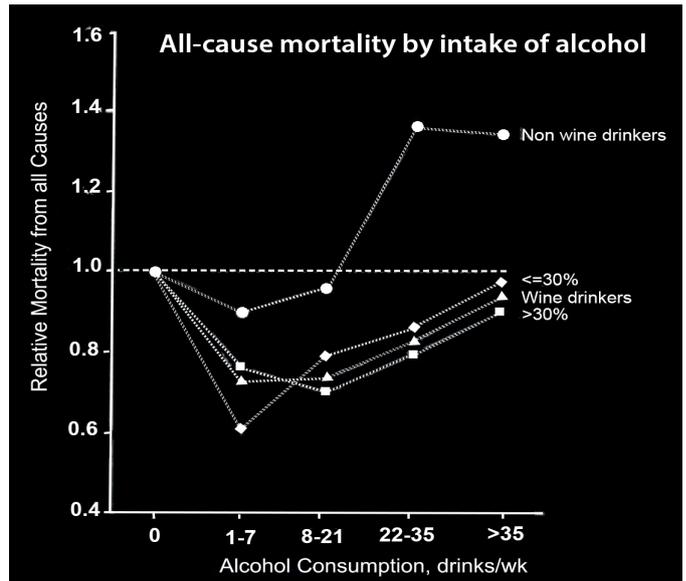


Fig 2. The Hazard ratio of all-cause mortality by alcohol consumption (grams per day), adjusted for age, education, marital status, smoking, BMI, fitness, diabetes and ischemic disease before baseline



**Separate curves by type of beverage**

Does the type of beverage matter? While most epidemiologic studies indicate that moderate drinking of any type of alcoholic beverage is associated with a lower risk of CVD, an increasing number of both animal experiments and human trials are demonstrating that the polyphenols and other non-alcoholic substances in wine and in some beers provide additional protection against disease. Such effects are especially important for wine when it is consumed with food, as has been recently summarised by Boban et al, 2016. It is anticipated that when more accurate assessments of actual alcohol consumption and drinking patterns become available, even greater protection against disease from moderate drinking will be shown, from beverages high in polyphenols drunk in moderation, ideally at mealtimes.



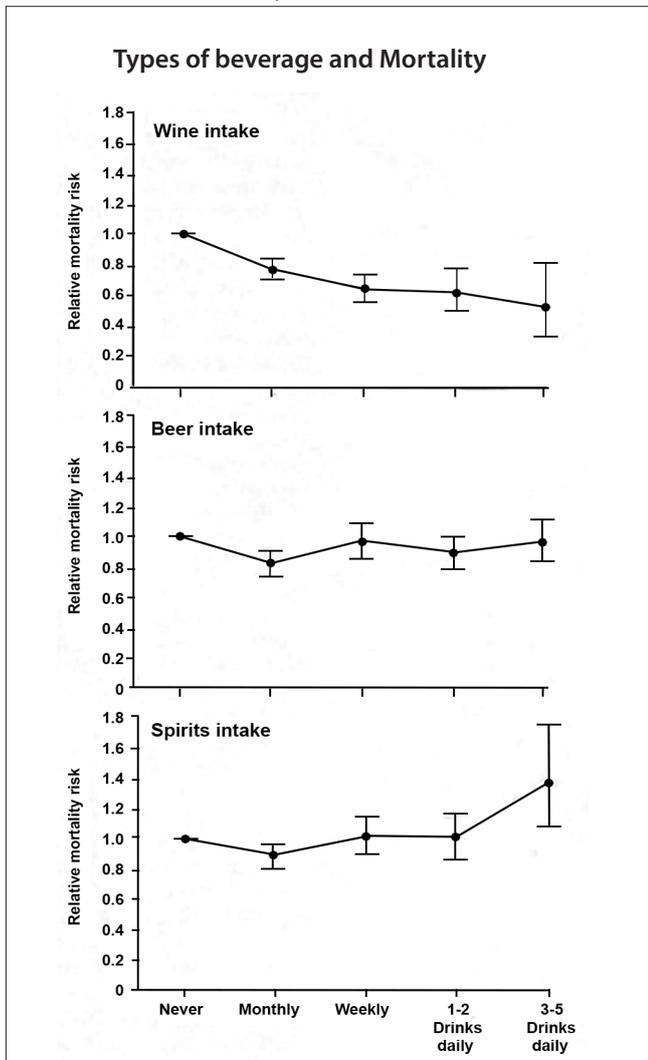
Gronbaek et al., 2000

1,500 women followed for 34 years by Mehlig et al (2008), large differences in risk of dementia were present according to the predominant beverage consumed. For subjects consuming some wine, the risk (versus non-drinkers) was 0.6 (95% CI 0.4, 0.8) while among those reporting that the only alcoholic beverage they consumed was wine, it was 0.3 (95% CI 0.1, 0.8), a 70% lower risk. It should be noted however, subjects whose predominant beverage was spirits showed a 50% greater risk of dementia (HR=1.5, CI 1.0, 2.2).

Similarly, Wu et al (Eur J Epidemiol 2017) found dementia risk was reduced for light-moderate consumers of wine (by 42%), but not significantly related to dementia risk for light-to-moderate consumers of either beer or spirits.

**Base curves on studies with repeated assessments of alcohol intake so that “changes” can be evaluated**

A report by King et al, 2008, from the ARIC study used repetitive assessments of alcohol consumption to judge the effects of changes in alcohol intake. In comparison with non-drinkers who continued to not consume alcohol, those subjects who subsequently began to drink moderately had a HR of 0.62 for incident CVD, a 38% reduction in their risk. Similarly, in their study of changes over time in alcohol intake, Powers et al (2008) found the moderate drinkers who continued to drink had the highest rating of overall health.



Gronbaek et al, BMJ,1995

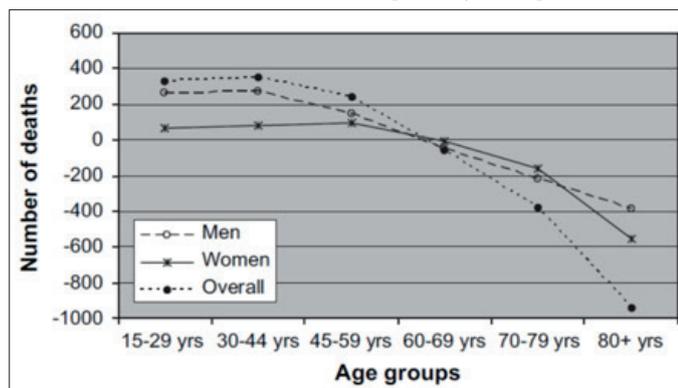
In addition to CVD and mortality, a J-shaped curve exists for many of the diseases of ageing, especially for the risk of dementia. For example, among



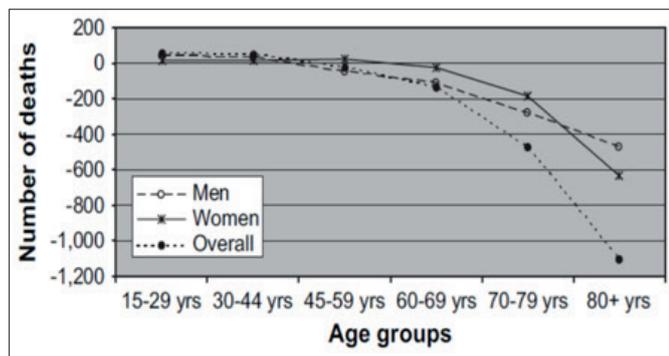
**Make curves more age-specific (separate young people from middle-aged and older adults)**

When a physician is giving advice regarding alcohol consumption to an individual patient, he uses data appropriate to the age of the subject. For example, when discussing the alcohol with a 50-year-old patient, at an age when cardiovascular disease begins to appear, he/she will focus on the potential risk/benefits that a 50-year-old can expect with alcohol consumption. He/she will not focus on the effects among young people; given that the “diseases of ageing” are of little regard for a 25-year-old, advice regarding alcohol intake would be quite different as the dangers of excessive drinking more important. Thus, data should be age-specific when being used to advise individual patients.

In an early report from Rehm et al (2007), deaths attributable to what the authors considered “moderate” consumption (an average of < 40 g/day for men, < 20 g/day for women, and including binge drinkers as well as regular drinkers), they showed increased risk among the young.



While showing increases in deaths among the young, the inclusion of binge drinkers within the “moderate” group was worrying. When he excluded the binge drinkers from the “moderate” group, most of the increases in the young disappeared.



These findings between young and older adults only emphasize the importance of tailoring

advice according to age: the beneficial health effects are predominantly among older subjects. These striking changes also emphasize the next suggestion for refining the J-shaped curve: focusing on the “pattern of drinking,” regular and moderate, with no beneficial effect for those who binge drink, quite the opposite in fact.

**Separate curves by patterns of drinking (binge vs. regular moderate, with or without food)**

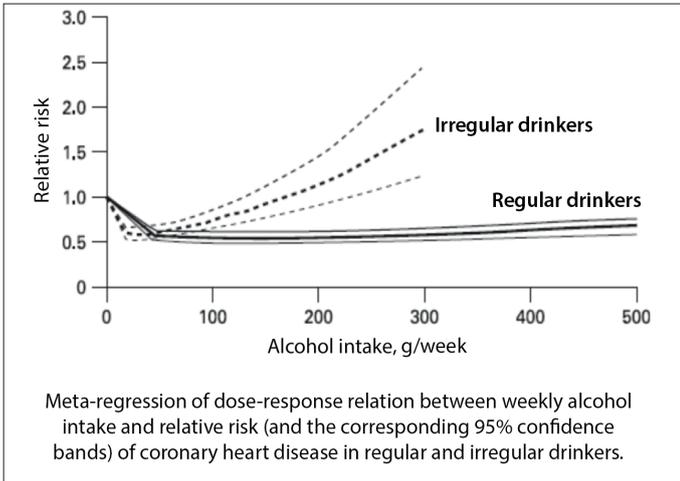
Increasing data show that “how” you drink may be more important (up to a certain level) than the “how often” you drink. Seeking a better measure of the “exposure” to alcohol; the importance of the pattern of drinking.

It is unfortunate that most epidemiologic studies have been forced to use only the average amount of alcohol consumed (over a week or month) as the measure of exposure. Most have been unable to adequately control for the pattern of drinking, even though it is clear that regular moderate consumers of alcohol have considerable health advantages over binge drinkers of the same average amount. Mukamal et al (2005) found that binge drinking (versus no binge drinking) eliminated the protective effects of alcohol on mortality among subjects who had suffered a myocardial infarction.

Piano et al (2017) recently reported that binge drinking was associated with many adverse cardiovascular effects; specifically binge drinking in middle-aged and older adults was associated with a higher risk of hypertension, myocardial infarction, and stroke. Further, these authors found that binge drinking in the young (18-30 years) had adverse effects on blood pressure, endothelial function, and cardiac arrhythmias. Many animal experiments show the same pattern; for example, Liu et al (2011) found completely different effects on coronary atherosclerosis induced among mice when the same amount of alcohol was administered on a daily basis (a decrease in atherosclerosis) versus only on two days of the week (an increase in atherosclerosis).

For Example, Bagnardi et al. (2008) showed very different associations with the risk of coronary heart disease according to whether the consumer was a “regular drinker” or an “irregular drinker,” with the latter being subjects who consumed alcohol only on the week-end.





Further, one key aspect of the pattern of drinking is whether or not the consumption of alcohol is with food or not. It has been repeatedly shown that the peak blood alcohol concentration following a given amount of alcohol consumed in conjunction with food intake is about 50% lower than when the same amount of alcohol is consumed during a meal. "Never drink without eating," is good advice; also, as the rate of consumption of alcohol relates to blood alcohol increase, the advice of Serge Renaud that "You drink water, but you sip wine" is also important.

**Evaluating effects of "under-reporting" of alcohol intake by subjects in epidemiologic studies**

Another important aspect of the pattern of drinking relates to the problem of "under-reporting" of alcohol intake by subjects in epidemiologic studies. In epidemiologic studies, adding self-reported information on the frequency of binge drinking to analyses has only partly corrected the problem of mixing regular moderate drinkers and binge drinkers in the same category. Klatsky and Udaltsova (2007) have found from their very large Kaiser-Permanente cohort that a more accurate identification of subjects who are "under reporters" of their alcohol intake improves the precision of estimates of effect. For mortality, these authors report: "The analysis reconfirms that the relation of alcohol drinking to total mortality is J-shaped, with reduced risk (mainly because of less cardiovascular disease) for lighter drinkers and increased risk for persons reporting more than 3 drinks per day. Infrequent (occasional) drinkers have risk similar to that of lifelong abstainers, while former drinkers are at increased risk, especially for non-cardiac death. The general shape of the relation of alcohol to mortality is similar for men and women. Age differences are substantial, with the apparent

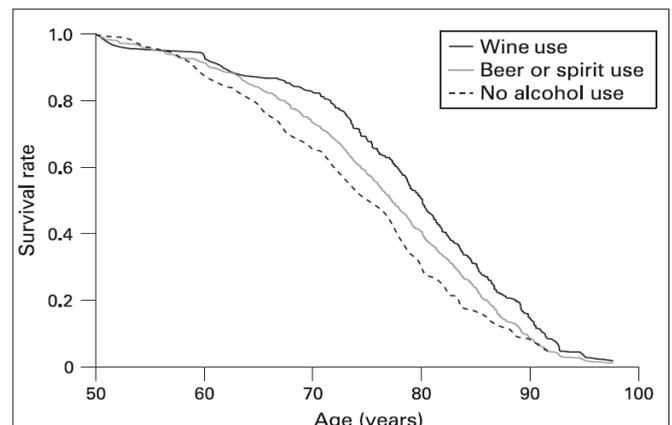
benefit from light-moderate drinking not seen before middle life. Our data indicate further that the apparent magnitude of benefit of lighter drinking is probably reduced by systematic underreporting." Their subsequent analyses have strengthened this premise, indicating that underreporting of alcohol intake affects the apparent risk for cancer as well; they found that when recognised under reporters are removed from the analysis, the risk of cancer from moderate drinking is essentially nil (Klatsky et al, 2014).

**Make alcohol exposure (X-axis) a sliding scale**

We know that people differ markedly in their response to varying levels of alcohol intake. Regular moderate drinkers may show few effects of a given amount of alcohol that would result in marked effects suggesting drunkenness in other people, especially older or frail people not accustomed to drinking. For example, for an elderly frail man who never drinks but wants to have a "sip of sherry" in the evening, the physician would not use a curve suggesting that up to two drinks/day may be recommended; the point of "safe" intake could be much lower. Thus, when showing a J-shaped curve to an individual patient, the point where adverse effects exceed beneficial effects can vary, depending on the age, drinking habits, and health conditions.

**Switch to survival curves**

Finally, I have found it easier to discuss potential adverse or beneficial effects of alcohol with individuals by forgetting the J-shaped curve, and focusing on survival curves of subjects at any given age according to whether or not they consume wine or other alcohol-containing beverage. As an example, consider the survival curve for a 50 year old subject shown by Streppel et al (2009) according to whether a subject consumes no alcohol, beer or spirits, or wine.



In these data from men in the Zutphen with an assessment of long-term alcohol intake, those who consumed an alcoholic beverage, especially those consuming wine, had lower risk of death over time (although, as we should not forget, everyone eventually dies). The latter brings up the typical findings that the self-reported quality of life is greater for moderate drinkers than for abstainers: you may live longer and enjoy it more.

### Focusing on a “Healthy Lifestyle”

When using any type of chart or figure to illustrate the effects of moderate drinking, it is key that alcohol consumption should be considered only one component of lifestyle behaviours related to health. Our colleagues in the large, long-term epidemiologic studies at Harvard (including the Nurses’ Health Study and the Health Professionals’ Follow-up study) have defined a “healthy lifestyle” as having five components:

- a. Don’t smoke
- b. Stay lean (avoid becoming obese)
- c. Exercise regularly
- d. Eat a healthy diet (e.g., a Mediterranean-type diet with lots of fruits, vegetables, whole grains, etc.)
- e. Unless contraindicated, consume a small amount of an alcoholic beverage with food regularly.

These investigators have found that subjects who meet all 5 criteria for lifestyle have dramatically lower risk of CVD, diabetes, and total mortality (usually greater than 90% reduction) when compared with subjects meeting none of these criteria. And each of the five components gives a significant addition to the protection against morbidity and mortality. So make the focus of advice to patients on the complete package, including the alcohol component unless it may be contraindicated by past alcohol misuse, liver disease, other health conditions, religious restrictions, or desires of the patient.

### Public health implications of a J-shaped curve

As of 2019, essentially all epidemiologic studies continue to show a J-shaped curve, especially for CVD and mortality. The BMJ meta-analysis published in late 2011 represents the most complete meta-analysis to date. It found no differences in the extent of relative risk reduction in cardiovascular disease mortality when

classification adjustments were made to address the sick quitter misclassification hypothesis. Of the 4235 studies considered and 84 studies involving over one million people included in the final analysis, the pooled estimates showed a lower risk of all-cause mortality for drinkers compared with non-drinkers (relative risk, 0.87; 95% CI, 0.83–0.92) [mja.com.au/journal/2013/198/8/j-curve-revisited-cardiovascular-benefits-moderate-alcohol-use-cannot-be#0\\_CBBDDHHCH](http://mja.com.au/journal/2013/198/8/j-curve-revisited-cardiovascular-benefits-moderate-alcohol-use-cannot-be#0_CBBDDHHCH)

Some health officials suggest that the public should be advised to focus on the nadir of the J-shaped curve for making decisions about drinking. Instead, many moderate drinkers are inclined to view the point on the curve where the risk of adverse health outcomes exceeds that of abstainers, a point that indicates when the level of drinking may begin to be less healthy than the risk associated with abstinence. Chokshi (2016) has pointed out that the marked differences between a linear curve and a J-shaped curve cause problems for public health messages. “Traditional messages such as restrict, ban, etc. work for linear relations between exposures and health (e.g., for cigarettes, illegal drugs) – ‘Just say no!’ However, they work less well for an exposure with a ‘J-shaped’ relation with health, such as wine.” It can be argued that, on the other hand, most people can appreciate that taking a little of something (e.g., a glass of wine) is different from taking a lot of it (e.g., a bottle or two of wine). The J-shaped curve provides an accurate portrayal of the scientific data relating alcohol to disease outcomes.

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## Alcohol consumption as a moderator of anxiety and sleep quality

Although people who sleep poorly may attempt to relieve anxiety for better sleep quality, whether daily alcohol consumption is a factor that moderates anxiety and sleep disturbance is not known.

A study explored the association between anxiety and sleep quality and also whether daily alcohol consumption acted as a moderator between anxiety and sleep quality in those who reported sleeping poorly.

Eighty-four participants aged 20-80 years who reported poor sleep (Pittsburgh Sleep Quality Index > 5) in northern Taiwan were enrolled in the cross-sectional study. A structured questionnaire covering demographics (including daily alcohol consumption), level of anxiety, level of depression, and perceived sleep quality was used to collect data.

The participants were mostly women (72.6%). The mean age was 41.81 years; 51.2%, 19.0%,

13.1%, and 14.3%, respectively, had minimal, mild, moderate, and severe anxiety. After adjusting for factors related to sleep quality using multiple regression analysis, receiving sleep therapy, consuming alcohol on a daily basis, and having anxiety were found to be predictors of poor sleep quality. However, daily alcohol consumption was found to moderate the relationship between anxiety and sleep quality.

Daily alcohol consumption may be a moderator between anxiety status and sleep quality, the authors conclude. They recommend that people who sleep poorly should avoid misusing alcohol to self-treat poor sleep quality or anxiety and should instead utilize sleep hygiene education and mental healthcare.

Source: Alcohol Consumption as a Moderator of Anxiety and Sleep Quality. Chueh KH, Guilleminault C, Lin CM. *J Nurs Res*. 2019 Jun;27(3):e23. doi: 10.1097/jnr.000000000000300.



## A reduced risk of chronic obstructive pulmonary disease (COPD) associated with the intake of some alcoholic beverages

Kaluza J, Harris HR, Linden A, Wolk A. Alcohol Consumption and Risk of Chronic Obstructive Pulmonary Disease: A Prospective Cohort Study of Men. *Am J Epidemiol* 2019;188:907–991.

### Authors' Abstract

Studies indicate an inverse association between moderate alcohol consumption and chronic inflammatory diseases; however, the association between alcohol consumption and chronic obstructive pulmonary disease (COPD) incidence has not been widely studied. We investigated the associations of total alcohol consumption and intake of specific alcoholic beverages with risk of COPD in a population-based prospective cohort study, the Cohort of Swedish Men (n=44,254). Alcohol consumption was assessed with a self-administered questionnaire in 1997.

During follow-up (1998–2014), 2,177 COPD cases were ascertained. Moderate alcohol consumption was associated with the lowest risk of COPD. A J-shaped association was observed for ethanol consumption (P for nonlinearity =0.003) and beer consumption (P for nonlinearity < 0.001); for wine consumption, a U-shaped association was observed (P for nonlinearity <0.001). Defining a "standard drink" as 12 g of ethanol, the multivariable-adjusted hazard ratios were 0.77 (95%confidence interval (CI): 0.66,0.90) and 0.92 (95% CI: 0.81,1.05) for beer consumption of 4.1–6.0 and >6.0 standard drinks/week(SDW) versus <1.0 SDW, respectively; 0.80 (95%CI:0.69,0.93) and 1.00 (95%CI:0.83,1.21 ) for wine consumption of 2.0 – 4.0 and >4.0 SDW versus <1.0 SDW, respectively; and 1.10 (95% CI: 0.98, 1.24) and 1.20 (95% CI: 0.99, 1.44) for liquor consumption of 2.0–4.0 and >4.0 SDW versus <1.0 SDW, respectively.

In conclusion, our findings suggest that moderate beer and wine consumption, but not liquor consumption, may decrease risk of COPD. Additional studies are needed to confirm these associations.

### Forum Comments

Chronic obstructive pulmonary disease (COPD) is a major health problem and cause of death throughout the world. While cigarette smoking is known to be the most important risk factor, there are limited data available on the relation of alcohol consumption to the condition. Given that moderate alcohol intake has been shown to decrease the risk of many inflammatory conditions, it may also affect the risk of COPD, which is associated with marked inflammation of lung tissues.

The present analyses are based on a large population-based cohort study of more than 44,000 Swedish men who were followed for up to 17 years for the development of COPD. An assessment of alcohol consumption, as well as beverage-specific intake, was made in 1997, and was related to the subsequent diagnosis of COPD, which occurred in 2,177 subjects during follow up. Overall, there was a clear J-shaped curve between alcohol intake and COPD. The authors conclude from their beverage-specific analyses that the moderate intake of beer or wine, but not liquor, may decrease the risk of COPD.

Among the strengths of the study is that it is population based and involves a large number of subjects, with more than 2,000 developing COPD. The authors had data permitting them to evaluate a number of demographic and lifestyle factors as potential confounders (including smoking status and pack-years of smoking, education, physical activity, BMI, and some indices of diet). However, there were very few ex-smokers or current smokers among the non-drinkers, making it somewhat difficult to adequately adjust for cigarette use as a cause of COPD. (The authors attempted to adjust for this by also reporting stratified analyses of smokers versus non-smokers, but the numbers of COPD cases among non-smokers was very low.) Further, their measure of socio-economic status was based on education, which varied markedly between consumers of each beverage, with wine consumers being more likely to have a university education than consumers of other beverages. Such wide differences between categories of exposure always raise questions as to the adequacy of evaluation for confounding by usual statistical techniques.

The authors also describe a number of potential biologic mechanisms by which alcohol and/or polyphenols might affect lung tissue and increase or decrease the risk of COPD. While there is increasing research on such mechanisms, the ultimate reasons why consumers of wine or beer may have a lower risk of disease remain undetermined, and residual confounding by a number of lifestyle factors may still play a role.

Comments of specific Forum members: Reviewer Van Velden wrote: "This is indeed an interesting study that demonstrated a clear beneficial



influence of antioxidant-rich alcoholic beverages on COPD. The investigators observed other lifestyle factors such as smoking and exercise as well, but educational factors and occupational exposure to pollutants may also influence the results. It is interesting to note that they also mention genetic factors that may have an influence on the outcome. This may warrant future studies to investigate the influence of genetics on COPD."

Forum member Finkel noted: "Regarding the drinking/COPD relationship as studied by Kaluza, et al, I believe we and others reading the paper should exercise caution in drawing conclusions because of the small and complex differences being measured in the face of variables notoriously at risk of influence by a host of potential confounding factors, especially those of numerous elements of what may be called lifestyle."

Forum member Skovenborg commented: "I agree with Finkel, and I also think that Van Velden has a good point. The study is well done and reported with due diligence; however, the problem is that we at this point do not know whether the results are due to anti-inflammatory effects of polyphenols in beer and wine, or to the different drinking patterns of beer-, wine-, and liquor-drinkers or residual confounding."

A number of Forum members were also worried by potential inadequacies in estimating alcohol consumption. Reviewer Skovenborg stated: "I think that this study is imperfect regarding one of the most important conditions for healthy enjoyment of alcohol: drinking pattern (as a regular, steady consumption of light to moderate amounts of alcohol, especially wine or beer, with meals generally relates to lower risk of disease). Also, as stated previously by Zhang, 'The differences in age and smoking status (the two strongest risk factors for COPD) among the drinking categories are substantial, making it challenging to appropriately account for their confounding effect using the multivariable-adjusted regression models.' Another weakness is that only alcohol consumption at baseline was assessed, with no ability to judge the effects of changes in consumption."

Skovenborg continued: "I also notice the very narrow windows for a positive effect of beer and wine: up to 4 glasses of wine/6 glasses of beer per week. Keeping in mind that this is a study from Sweden with a particular anti-alcohol tradition

and anti-alcohol political climate, it might be of interest to take a look at studies of under reporting in Sweden. One study found a coverage rate of 51% in Sweden which might be marginally better than in the other Scandinavian countries due to the Systembolaget organization of alcohol sales in Sweden; Mäkelä et al reported that the coverage rate was 45% for Denmark, 40% for Finland, 43% for Norway, and 51% for Sweden.

"Another study (Kühlhorn & Leifman) found differential under reporting regarding information about drinking pattern; in the present paper, Kaluza et al present a 'normal week's consumption' category. Two Swedish alcohol surveys were compared in a search for a reasonable explanation of the large difference in their coverage rates, namely 75% and 28%. The technique used in the survey with a very high coverage rate (Survey A) takes into consideration the actual drinking pattern of the population studied (i.e., the concentration of drinking on weekends). By dividing a 'normal week's consumption' into four units (Monday-Thursday, Friday, Saturday and Sunday), the technique allows one to average periods with varying drinking habits. In the survey with a low coverage rate (Survey B) a "normal week's consumption" was not so divided. A third study (Ramstedt) found differential coverage rates for respectively beer & spirits and wine. Of the recorded amount of purchases at Systembolaget, 87% was reported in the survey, compared with the 40-60% usually found for self-reported consumption. Significant differences across beverages were revealed, showing a lower coverage rate for beer and spirits and a higher coverage rate for wine and cider." It is not possible to determine the extent to which such problems in assessing actual alcohol intake may have played in the reported beverage-specific results in this study.

### References from Forum critique

Kühlhorn E, Leifman H. Alcohol surveys with high and low coverage rate: a comparative analysis of survey strategies in the alcohol field. *J Stud Alcohol* 1993;54:542-554.

Mäkelä P, Fonager K, Hibell B, Nordlund S, Sabroe S, Simpura J. Episodic heavy drinking in four Nordic countries: a comparative survey. *Addiction* 2001;96:1575-1588.

Ramstedt M. How much alcohol do you buy? A comparison of self-reported alcohol purchases with actual sales. *Addiction* 2010;105:649-654.



## Forum Summary

Chronic obstructive pulmonary disease (COPD) is a major health problem and cause of death throughout the world. While cigarette smoking is known to be the most important risk factor, there are limited data available on the relation of alcohol consumption to the condition. Given that moderate alcohol intake has been shown to decrease the risk of many inflammatory conditions, it may also affect the risk of COPD, which is associated with marked inflammation of lung tissues.

In the present study, the investigators related total alcohol consumption and intake of specific alcoholic beverages with the risk of COPD, based on data from more than 44,000 Swedish men in a population-based prospective cohort study. A total of 2,177 COPD cases were ascertained during follow up that extended up to 17 years. In their analyses, the authors had data permitting them to evaluate a number of demographic and lifestyle factors as potential confounders (including smoking status and pack-years of smoking, education, physical activity, BMI, and some indices of diet). However, there were very few ex-smokers or current smokers among the non-drinkers, making it somewhat difficult to adequately adjust for cigarette use as a cause of COPD.

Forum members thought that there are a number of deficiencies in this study that somewhat weaken its conclusions; especially important was the lack of ability to consider the pattern of drinking (regular, moderate versus binge drinking). Still, there is a strong consistency between the results of this study (indicating a “J-shaped” or “U-shaped” curve for alcohol intake and COPD) and results from extensive previous epidemiologic and experimental research.

Overall, the cumulative research findings now suggest that pulmonary disease might be included among the “diseases of ageing” that show a reduction in risk among moderate consumers of certain alcoholic beverages. Based on some previous epidemiologic studies and results from numerous experimental studies, data now suggest that, in addition to alcohol, the polyphenols present in wine and some beers may offer protection against COPD. While in the present study red wine consumption was associated with the lowest risk of COPD, Forum members acknowledge residual confounding by other lifestyle factors may still play a role.

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

Harvey Finkel, MD, Hematology/Oncology, Retired (Formerly, Clinical Professor of Medicine, Boston University Medical Center, Boston, MA, USA)

David Van Velden, MD, Dept. of Pathology, Stellenbosch University, Stellenbosch, South Africa

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

R. Curtis Ellison, MD, Professor of Medicine, Section of Preventive Medicine & Epidemiology, Boston University School of Medicine, Boston, MA, USA

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## Low-moderate prenatal alcohol exposure and offspring attention-deficit hyperactivity disorder

A study evaluated the available evidence on the association between low-to-moderate prenatal alcohol exposure (PAE) and the development of attention-deficit hyperactivity disorder (ADHD) symptoms in the offspring.

Following a literature review using searches in EMBASE, Pubmed, Medline, and PsycINFO and selected references, ten studies were included in the systematic review and six in the meta-analysis. Eight studies found no association and two studies suggested an apparent protective effect of low PAE in hyperactivity/inattention symptoms in boys.

These results were confirmed by the meta-analysis which showed no association between  $\leq 20$  g/week [OR 1.01 (0.68-1.49)],  $\leq 50$  g/week [OR 0.94 (0.85-1.03)] and  $\leq 70$  g/week [OR 0.94 (0.86-1.02)] and ADHD symptoms, with no evidence of publication bias. Stratified analysis by sex for a PAE  $\leq 50$  g/week exposed less risk of ADHD symptoms in boys compared to girls [OR 0.89 (0.83-0.96)].

The study therefore found no increased risk of ADHD symptoms in offspring born to mothers who drank alcohol up to 70 g/week.

Source: Low-moderate prenatal alcohol exposure and offspring attention-deficit hyperactivity disorder (ADHD): systematic review and meta-analysis. San Martin Porter M, Maravilla JC, Betts KS, Alati R. Arch Gynecol Obstet. 2019 Jun 3. doi.org/10.1007/s00404-019-05204-x.



## Reward-related brain activity prospectively predicts increases in alcohol use in adolescents

Altered activity within reward-related neural regions, including the ventral striatum (VS) and medial prefrontal cortex (mPFC), is associated with concurrent problematic substance use. Researchers sought to identify patterns of reward-related neural activity that prospectively predicted changes in alcohol use two years after magnetic resonance imaging (MRI) scanning in a sample of adolescents, and examined whether these patterns differed by sex. In addition, the researchers also tested whether depression symptoms or impulsivity mediated associations between neural activity and future alcohol use.

262 Mexican-origin adolescents (129 male) completed the Monetary Incentive Delay task during an fMRI scan at age 16. Participants reported on their alcohol use at ages 16 and 18.

Results indicated that different patterns of reward-related neural activity predicted future increases in alcohol use for male and female adolescents. In boys, higher ventral striatum activity during

reward anticipation and average ventral medial prefrontal cortex activity during reward feedback predicted increases in alcohol use from age 16 to 18; in girls, higher dorsal medial prefrontal cortex activity and blunted ventral striatum activity during reward anticipation predicted increases in alcohol use from age 16 to 18. Depression symptoms or impulsivity did not mediate these associations.

The results suggest that different pathways of risk may lead to problematic alcohol use for adolescent boys and girls. These sex differences in neural risk pathways have important implications for prevention and intervention approaches targeting Mexican-origin youth, the authors comment.

Source: Reward-Related Brain Activity Prospectively Predicts Increases in Alcohol Use in Adolescents. Swartz JR, Weissman DG, Ferrer E, Beard SJ, Fassbender C, Robins RW, Hastings PD, Guyer AEJ *Am Acad Child Adolesc Psychiatry*. 2019 Jun 4. pii: S0890-8567(19)30388-0. doi.org/10.1016/j.jaac.2019.05.022.

## Alcohol consumption and incident dementia in older Japanese adults

A study evaluated the association between the amount and frequency of alcohol consumption and incident dementia in older Japanese adults using large sample size data over a long follow-up period.

The study carried out in Japan included 53,311 older adults who were followed from 2008 to 2014. A health checkup questionnaire was used to assess the amount and frequency of alcohol consumption. The Dementia Scale of long-term care insurance was used as a measure of incident dementia. Cox proportional hazards models were used to calculate adjusted hazard ratios, with their 95% confidence intervals, for the incidence of dementia across the categories of alcohol consumption by sex.

During a 7-year follow-up period, 14,479 participants were regarded as having incident dementia. Compared with non-drinkers, the multivariate adjusted hazard ratios for participants with alcohol consumption  $\leq 2$  units per day, occasionally (0.88, 95% CI 0.81-0.96 in men and

0.84, 95% 0.79-0.90 in women) and daily (0.79, 95% 0.73-0.85 in men and 0.87, 95% 0.78-0.97 in women) were statistically significant, and the difference between occasional and daily consumption was only statistically significant in men.

Compared with non-drinkers, the multivariate adjusted hazard ratios for participants with alcohol consumption  $> 2$  units per day, occasionally (0.91, 95% 0.71-1.16 in men and 1.09, 95% 0.72-1.67 in women) and daily consumption (0.89, 95% 0.81-1.00 in men and 1.16, 95% 0.84-1.81 in women) were not significant.

Alcohol consumption of  $\leq 2$  units per day, occasionally or daily, could reduce the risk of incident dementia, with greater benefit for men with such daily consumption, the authors conclude.

Source: Alcohol consumption and incident dementia in older Japanese adults: The Okayama Study. Liu Y, Mitsuhashi T, Yamakawa M, Sasai M, Tsuda T, Doi H, Hamada J. *Geriatr Gerontol Int*. 2019 Jun 7. doi.org/10.1111/ggi.13694.



## Habitual alcohol intake modifies relationship of uric acid to incident chronic kidney disease

Previous studies showed that higher serum uric acid levels increased the risk of chronic kidney disease (CKD), but moderate alcohol consumption decreased it. The comparative importance of serum uric acid levels and habitual alcohol consumption as risk factors for chronic kidney disease remain undefined. Researchers therefore evaluated the relationship of baseline serum uric acid level in combination with daily alcohol consumption to the incidence of chronic kidney disease.

The prospective cohort study included 9,116 middle-aged nondiabetic Japanese men without chronic kidney disease or proteinuria who were not taking antihypertensive medications nor urate-lowering medications at entry. Chronic kidney disease was defined as estimated glomerular filtration rate  $<60$  mL/min/1.73 m<sup>2</sup>. The study investigated the relationship of baseline serum uric acid level in combination with daily alcohol consumption to the incidence of chronic kidney disease during an 11-year observation period. Daily alcohol consumption was classified into 4 groups: nondrinkers, light drinkers (0.1-23.0 g ethanol/day), moderate drinkers (23.1-46.0 g ethanol/day), and heavy drinkers ( $\geq 46.1$  g ethanol/day).

During the 79,361 person-years follow-up period, a total of 1,230 subjects developed chronic kidney disease. Higher serum uric acid levels increased

risk of chronic kidney disease; and moderate daily alcohol consumption decreased the risk. Multiple-adjusted hazard ratios of chronic kidney disease were 1.38 (95% CI 1.11-1.70), 1.58 (95% CI 1.28-1.95), 2.27 (95% CI 1.86-2.77), and 3.12 (95% CI 2.56-3.81) for quintile 2, quintile 3, quintile 4, and quintile 5 of serum uric acid levels, respectively, compared with quintile 1, and that for moderate drinkers was 0.55 (95% CI 0.46-0.66) compared with nondrinkers. In the joint analysis of alcohol consumption and serum uric acid, moderate drinkers with the lowest tertile of serum uric acid levels had the lowest risk of chronic kidney disease, but nondrinkers with the highest tertile of serum uric acid levels had the highest risk of chronic kidney disease.

The authors conclude that in the joint analysis of alcohol consumption and serum uric acid, moderate drinkers with the lowest tertile of serum uric acid levels had the lowest risk of chronic kidney disease. Serum uric acid level and daily alcohol consumption were independently associated with the risk of chronic kidney disease. Non drinkers with the highest serum uric acid level had the highest risk of chronic kidney disease.

**Source:** Habitual alcohol intake modifies relationship of uric acid to incident chronic kidney disease. Okada Y, Uehara S, Shibata M, Koh H, Oue K, Kambe H, Morimoto M, Sato KK, Hayashi T. *Am J Nephrol.* 2019 Jun 6:1-8. doi.org/10.1159/000500707.

## Impact of alcohol consumption on the risk of developing bladder cancer

A systematic review and meta-analysis was conducted to investigate the association of alcohol consumption with the risk of bladder cancer, looking at the results for different types of alcoholic beverages.

A systematic search of Web of Science, Medline/PubMed and Cochrane library was performed in May 2018. Studies were considered eligible if they assessed the risk of bladder cancer due to alcohol consumption (moderate or heavy dose) and different types of alcoholic beverages (moderate or heavy dose) in multivariable analysis in the general population) or compared with a control group of individuals without BCa.

Sixteen studies were included in the meta-analysis. Moderate and heavy alcohol consumption did not increase the risk of bladder cancer in the entire population. Sub-group and sensitivity analyses revealed that heavy alcohol consumption

significantly increased the risk of bladder cancer in the Japanese population, RR 1.31 (95% CI 1.08-1.58,  $P < 0.01$ ) in the multivariable analysis, and in males RR of 1.50 (95% CI 1.18-1.92,  $P < 0.01$ ), with no significant statistical heterogeneity. Moreover, heavy consumption of spirits drinks increased the risk of bladder cancer in males, RR 1.42 (95% CI 1.15-1.75,  $P < 0.01$ ).

The researchers state that in this meta-analysis, moderate and heavy alcohol consumption did not increase the risk of bladder cancer significantly. However, heavy consumption of alcohol might increase the risk of bladder cancer in males and in some specific populations.

**Source:** Impact of alcohol consumption on the risk of developing bladder cancer: a systematic review and meta-analysis. Vartolomei MD, Iwata T, Roth B, Kimura S, Mathieu R, Ferro M, Shariat SF, Seitz C. *World J Urol.* 2019 Jun 6. doi.org/10.1007/s00345-019-02825-4.



## The association between alcohol consumption and renal tubular dysfunction induced by cadmium exposure

Alcohol consumption is inversely associated with the risk of chronic kidney diseases. However, this association has not been reported in populations exposed to cadmium.

Researchers examined the association between alcohol consumption and renal tubular dysfunction in populations living in cadmium-polluted areas. A total of 446 subjects (170 men and 276 women) were included in the analysis.

The urinary cadmium and cadmium in blood were determined as the exposure biomarkers. Urinary N-acetyl- $\beta$ -D-glucosaminidase (UNAG) and  $\beta$ 2-microglobulin were measured as renal indicators. Alcohol drinking patterns were obtained from a questionnaire and divided into four categories: non-drinking, light drinking (<3 drinks/week), moderate drinking (3-7 drinks/week), and heavy drinking (> 7 drinks /week).

Where UNAG was the indicator of renal dysfunction, the prevalence of renal tubular dysfunction was

lower in subjects with alcohol consumption, both in men ( $\chi^2=8.5$ ,  $p<0.01$ ) and women ( $\chi^2=8.3$ ,  $p<0.01$ ). The odds ratio (OR) of subjects with light and moderate alcohol drinking was 0.31 (95% confidence interval (CI), 0.1-0.99) and 0.30 (95%CI, 0.1-0.96), respectively, compared with those of non-drinkers after adjusting with the confounders in men. Similar results were observed in women with light drinking (OR=0.33, 95%CI, 0.15-0.70). Similar trends were observed in those subjects with high cadmium in blood (> 3.0  $\mu\text{g/L}$ ) or urinary cadmium (> 5.0  $\mu\text{g/g}$  creatinine).

The results of the analysis indicate that alcohol consumption is inversely associated with cadmium-induced renal tubular dysfunction.

Source: The association between alcohol consumption and renal tubular dysfunction induced by cadmium exposure. Chen X, Cui W, Duan N, Zhu G, Jin T, Wang Z. *Biol Trace Elem Res*. 2019 May 27. doi.org/10.1007/s12011-019-01748-w.

## The influences of red wine in phenotypes of human cancer cells

According to the authors of a study published in the journal *Gene*, approximately 3.6% human cancers worldwide derive from chronic alcohol drinking, including oral, liver, breast and other organs. The authors state that their studies in vivo and in vitro have demonstrated that diluted ethanol increase RNA Pol III gene transcription and promotes cell proliferation and transformation, as well as tumour formation. However, it is unclear about the effect of red wines on the human cancer cells.

In the current study, the authors investigated the roles of red wine in human cancer cell growth, colony formation and RNA Pol III gene transcription. Low concentration (12.5 mM to 25 mM) of ethanol enhances cell proliferation of breast and esophageal cancer lines, whereas its higher concentration (100 mM to 200 mM) slightly decreases the rates. In contrast, red wines significantly repress cell proliferation of different human cancer lines from low dose to high dose.

The results reveal that the red wine also inhibits colony formation of human breast cancer and esophageal carcinoma cells. The effects of repression on different human cancer lines are in a dose-dependent manner.

Further analysis indicates that ethanol increases RNA Pol III gene transcription, whereas the red wines significantly reduce transcription of the genes. Interestingly, the effects of mature wine (brick red) on cancer cell phenotypes are much stronger than young wine (intense violet). Together, these new findings suggest that red wines may contain some bioactive components, which are able to inhibit human cancer cell growth and colony formation.

Source: The influences of red wine in phenotypes of human cancer cells. Chen S, Yi Y, Xia T, Hong Z, Zhang Y, Shi G, He Z, Zhong S. *Gene*. 2019 Jun 20;702:194-204. doi.org/10.1016/j.gene.2018.10.049.



## Effects of wine on blood pressure, glucose parameters, and lipid profile in type 2 diabetes mellitus

Previous studies have produced conflicting results about the effects of wine intake on glucose parameters and the risk of cardiovascular diseases in type 2 diabetes mellitus (T2DM). A study investigated further the association between wine digestion and these outcomes in T2DM patients.

A search of PubMed, Embase, and Scopus databases (up to November 2018) was performed for randomized interventional trials which evaluated the effect of wine on blood pressure (BP), glucose parameters and lipid profiles in T2DM patients.

A total of 9 randomized interventional studies were included in the meta-analysis. Overall, significant associations were found between wine intake and diastolic BP (weighted mean difference [WMD] = 0.10) and total cholesterol (WMD=0.16), whereas

no noticeable differences in glucose parameters, systolic BP, low-density lipoprotein cholesterol, triglyceride and high-density lipoprotein cholesterol were identified between wine and controls groups.

This meta-analysis revealed that moderate wine consumption among type 2 diabetes mellitus patients could reduce the level of diastolic blood pressure and total cholesterol, but not glucose parameters and other cardiovascular risk factors.

Source: Effects of wine on blood pressure, glucose parameters, and lipid profile in type 2 diabetes mellitus: A meta-analysis of randomized interventional trials (PRISMA Compliant). Ye J, Chen X, Bao L. *Medicine (Baltimore)*. 2019 Jun;98(23):e15771. doi.org/10.1097/MD.00000000000015771.

## Alcohol drinking and the risk of chronic kidney damage

The findings from previous research on the relationship between alcohol drinking and chronic kidney damage (mainly including declined glomerular filtration rate (GFR), proteinuria, and end-stage renal disease) have been conflicting.

A meta-analysis was conducted to investigate the potential associations. PubMed and Web of Science were searched to identify prospective studies assessing the associations between alcohol drinking and chronic kidney damage published up to March 2019. A total of 15 cohort studies were included in the study with 268,723 participants and 31,766 incident cases.

Participants with low (<13 g/d), moderate (13 to 26 g/d), and high (26 to 60 g/d) dose of alcohol drinking had 12% (RR: 0.88, 95% CI: 0.83 to 0.93), 24% (RR: 0.76, 95% CI: 0.70 to 0.83), and 21% (RR: 0.79, 95% CI: 0.71 to 0.88) lower risk of chronic kidney damage compared with the reference

group (non- or occasional drinkers), respectively. The lower risk for chronic kidney damage remained significant for the declined glomerular filtration rate, in men, or for participants aged less than 55 yrs, or studies with longer than 8 yrs of follow-up, while severe alcohol drinking ( $\geq 60$  g/d) insignificantly increased the risk of chronic kidney damage (RR: 1.07, 95% CI: 0.53 to 2.15).

The results suggest that participants drinking less than 60 g alcohol per day were at lower risk of declined glomerular filtration rate, especially for men or participants aged less than 55 yrs. The researchers say that more prospective cohort studies are required to confirm their present findings.

Source: Alcohol drinking and the risk of chronic kidney damage: A meta-analysis of 15 prospective cohort studies. Li D, Xu J, Liu F, Wang X, Yang H, Li X. *Alcohol Clin Exp Res*. 2019 May 14. doi.org/10.1111/acer.14112.

## NICE plans new standard for fetal alcohol disorders

The BMJ reports that a quality standard on fetal alcohol disorders is set to be developed by the National Institute for Health and Care Excellence (NICE). The announcement came as a charity's report showed that clinical commissioning groups are failing to commission services for people with neuro-developmental disorders arising from exposure to alcohol in the womb.

The Department of Health and Social Care informed the All Party Parliamentary Group on Fetal Alcohol Spectrum Disorders (FASD) that the quality standard will be based on Scottish guidelines published in April this year.

BMJ 2019;365:l2186 doi.org/10.1136/bmj.l2186



## Adult-life alcohol consumption and age-related cognitive decline from early adulthood to late midlife

Alcohol consumption is a modifiable and plausible risk factor for age-related cognitive decline but more longitudinal studies investigating the association are needed. A study estimated associations of adult-life alcohol consumption and consumption patterns with age-related cognitive decline.

2,498 Danish men from the Lifestyle and Cognition Follow-up study 2015 were included in the analysis. The researchers investigated the associations of self-reported adult-life weekly alcohol consumption and weekly extreme binge drinking with changes in test scores on an identical validated test of intelligence completed in early adulthood and late midlife. Binge drinking was defined as  $\geq 10$  units on the same occasion. Analyses were adjusted for year of birth, retest interval, baseline IQ, education and smoking.

Men with adult-life alcohol consumption of more than 28 units/week had a larger decline in IQ scores from early adulthood to late midlife than men consuming 1–14 units/week (B29–35units/week =  $-3.6$ ;  $P < 0.001$ ). Likewise, a 1-year increase

in weekly extreme binge drinking was associated with a 0.12-point decline in IQ scores. Weekly extreme binge drinking explained more variance in IQ changes than average weekly consumption. In analyses including mutual adjustment of weekly extreme binge drinking and average weekly alcohol consumption, the estimated IQ decline associated with extreme binge drinking was largely unaffected, whereas the association with weekly alcohol consumption became non-significant.

Adult-life heavy alcohol consumption and extreme binge drinking appear to be associated with larger cognitive decline in men. Moreover, extreme binge drinking may be more important than weekly alcohol consumption in relation to cognitive decline.

**Source:** Adult-life alcohol consumption and age-related cognitive decline from early adulthood to late midlife. Marie Grønkjær, Trine Flensburg-Madsen, Merete Osler, Holger J Sørensen, Ulrik Becker, Erik L Mortensen. *Alcohol and Alcoholism*, agz038, doi.org/10.1093/alcalc/agz038

## Willingness to adhere to current UK low-risk alcohol guidelines to potentially reduce dementia risk

People over 50 are increasing their alcohol intake, and potentially could also be increasing their risk of dementia according to a study published in the *Journal of Alzheimer's Disease*. The study investigated whether people would be willing to adhere to current United Kingdom (UK, "low-risk") alcohol guidelines to reduce dementia risk.

A national cross-sectional online survey recruited a sample of 3,948 individuals aged 50 and over without dementia in the UK. Self-reported willingness to comply with low-risk guidelines was predicted using logistic regression. Other relevant self-reported variables included physical health, lifestyle, and current alcohol intake.

90% of the sample reported drinking alcohol at least once a month with 23% ( $n=795$ ) exceeding the low-risk guidelines ( $>14$  units per week). A larger proportion of men, those who were overweight, and people without a partner reported drinking above the recommended level. Most people who consumed alcohol (74.3%)

appeared willing to adhere to low-risk guidelines if they were told that their risk of having dementia could be reduced. Increased willingness was found in women (OR 1.81), in people who had at least one child (OR 1.36), and those who slept well (OR 1.45). People who were obese (OR 0.72), those who drank alcohol above limits (OR 0.13), and those who were smokers (OR 0.56) were less willing to adhere to current guidelines.

Men and people with more lifestyle risk factors for common chronic diseases (e.g., smoking, obesity, and excess alcohol consumption) are less willing to adhere to current alcohol low-risk guidelines to reduce dementia risk, the authors conclude.

**Source:** Willingness to Adhere to Current UK Low-Risk Alcohol Guidelines to Potentially Reduce Dementia Risk: A National Survey of People Aged 50 and Over. Oliveira D, Jones KA, Ogollah R, Ozupek S, Hogervorst E, Orrell M. *J Alzheimers Dis*. 2019 May 20. doi.org/10.3233/JAD-181224.



## Changes in the human metabolome associated with alcohol use

The metabolome refers to the functional status of the cell, organ or the whole body. Metabolomic methods measure the metabolome (metabolite profile) which can be used to examine disease progression and treatment responses.

A research group reviewed metabolomics studies examining effects of alcohol use in humans. A literature search was performed to identify reports on changes in the human metabolite profile associated with alcohol use. 23 relevant articles published before end of 2018 were found.

Most studies had investigated plasma, serum or urine samples; only four studies had examined other sample types (liver, faeces and broncho-alveolar lavage fluid). Levels of 51 metabolites were altered in two or more of the reviewed studies. Alcohol use was associated with changes in the levels of lipids and amino acids. In general, levels of fatty acids, phosphatidylcholine diacyls

and steroid metabolites tended to increase, whereas those of phosphatidylcholine acyl-alkyls and hydroxysphingomyelins declined. Common alterations in circulatory levels of amino acids included decreased levels of glutamine, and increased levels of tyrosine and alanine.

More studies, especially with a longitudinal study design, or using more varied sample materials (e.g. organs or saliva), are needed to clarify alcohol-induced diseases and alterations at a target organ level. The researchers state that hopefully, this will lead to the discovery of new treatments, improved recognition of individuals at high risk and identification of those subjects who would benefit most from certain treatments.

Source: *Changes in the Human Metabolome Associated With Alcohol Use: A Review*. Taina Voutilainen Olli Kärkkäinen. *Alcohol and Alcoholism*, Volume 54, Issue 3, May 2019, Pages 225–234. doi.org/10.1093/alcalc/agz030

## European Beer and Health Symposium



The 9th Beer and Health Symposium is taking place on 24 September in Brussels.

The Organising Committee are currently inviting scientists to submit an abstract and poster of their research related to alcohol and health for the poster session at the 9th European Beer and Health Symposium, 24th of September 2019 – Brussels.

[beerandhealth.eu/symposium/call-for-posters/](http://beerandhealth.eu/symposium/call-for-posters/)

## Alcohol supply as a favour for a friend in Australia

Adolescents under the legal purchase age primarily source their alcohol through social networks. A study assessed the provision context from the perspective of both underage recipients and their suppliers who were older peers and siblings.

Interviewer-administered surveys were conducted with 590 risky-drinking (50g alcohol per session, at least monthly) adolescents. 269 participants of legal purchase age (18-19 year-olds) reported their provision to 16-17-year-olds under eight scenarios. Those 321 participants aged 14-17 reported receipt of alcohol under the same scenarios plus two parental supply contexts.

Purchase-age participants reported supply: to an underage friend (67%), an acquaintance (44%), or a sibling (16%) to drink at the same party; to a friend (43%) or sibling (20%) to take to another party (20%) and to a stranger near a bottle shop (5%). Supply to a friend at the same party was more likely if money was exchanged

(60% vs. 40%). 98% of 14-17 year-olds reported receiving alcohol from an adult (including 36% from a parent for consumption away from the parent), with a similar pattern of receipt scenarios as those reported by the 18-19 year-olds.

Provision of alcohol was more frequent with a friend than a sibling or stranger, in close environmental proximity, and if money was exchanged. The authors suggest that, because supply may be sensitive to monetary considerations, the incidence of underage receipt may be affected by community-wide pricing measures. They argue that traditional alcohol availability regulations should be supplemented by strategies relating to the social nature of supply and demand.

Source: *Alcohol supply as a favour for a friend: Scenarios of alcohol supply to younger friends and siblings*. Lam T, Ogeil RP, Fischer J, Midford R, Lubman DI, Gilmore W, Chikritzhs TN, Liang W, Lenton SR, Aiken A, Allsop S. *Health Promot J Austr*. 2019 Jun 7. doi.org/10.1002/hpja.264.



## The relationship between parental attitudes and children's alcohol use

In a study published in the journal *Addiction*, Mariliis Tael-Oeren and colleagues at Cambridge's Behavioural Science Group and the School of Health Sciences at the University of East Anglia (UEA) found that children whose parents had less restrictive attitudes towards their child's alcohol use were more likely to start drinking alcohol than their peers. They also drank – and got drunk – more frequently.

The findings come from a review of published articles examining parent-child pairs and the relationship between parental attitudes and their child's alcohol use. The researchers pooled information from the 29 most relevant articles and analysed data from almost 16,500 children and more than 15,000 parents in the US and Europe.

Mariliis Tael-Oeren, PhD student and lead author for the study, says: "Our study suggests that when parents have a lenient attitude towards their children drinking alcohol, this can lead to their child drinking more frequently – and drinking too much.

The researchers also found a mismatch between what children think is their parent's attitude towards them drinking and what the parent's attitude actually is. Children were no more likely to start drinking alcohol if they perceived their parent to have a lenient attitude, but once they had started drinking, they were more likely to drink often.

Tael-Oeren explained "This mismatch doesn't mean that children perceive parental attitudes completely differently from their parents... Instead, it could be that their perceptions are skewed towards thinking their parents have more lenient attitudes. This could be because their parents haven't expressed their attitudes in a way that the children really understand."

"Alcohol use can be problematic, particularly among young people. It's important that children understand the short and long term consequences of drinking. If parents don't want their children to drink, then our study suggests they need to be clear about the message they give out."

Senior author Professor Stephen Sutton says that social norms could lead to confusion among children. "Alcohol use is influenced by a variety of factors, including attitudes and social norms. If the social norm supports parents introducing alcohol to children, children might mistakenly assume

that their parents are more lenient, even when this is not the case."

Dr Felix Naughton, from UEA's School of Health Sciences, adds: "Uncovering this mismatch in perceptions is important as it may have implications for parenting programmes designed to support families in reducing childhood alcohol use and indeed for parents who just want to know what they can do to protect their children."

Source: *The relationship between parental attitudes and children's alcohol use: A systematic review and meta-analysis*. M Tael-Öeren, F Naughton, S Sutton. *Addiction*; 12 June 2019. doi.org/10.1111/add.14615.

## High-risk environmental circumstances for adolescent drinking

The social and physical environment in which drinking occurs can impact the level of alcohol consumption and related consequences among adolescents. The authors of a study published in the journal of *Substance Use* state that for comprehensive prevention programming, it is necessary to understand which aspects of the drinking context exert the most risk for adolescent alcohol use.

A literature review was conducted to identify published studies that examined the relationship between aspects of the social (e.g., number of people present), situational (e.g., adult supervision) and location-based characteristics of the drinking context and adolescent alcohol consumption. A total of 15,853 articles were screened for inclusion, of which 31 were included for qualitative synthesis.

Adolescents most commonly consume alcohol on weekend evenings and either in their home or someone else's home. Availability of alcohol, increased group size, and the presence of others, particularly close friends, who are drinking increases risk for alcohol use.

The authors conclude that certain environments exert greater risk for alcohol consumption among adolescents. Characteristics of these high-risk contexts represent modifiable factors of the environment that are informative to prevention and policy efforts.

Source: *A systematic review of high-risk environmental circumstances for adolescent drinking*. M. J. Cox, K. Sewell, K. L. Egan, S. Baird, C. Eby, K. Ellis & J. Kuteh. *Journal of Substance Use*, doi.org/10.1080/14659891.2019.1620890.



## Drinkers ignore government guidance and construct personal thresholds of too much alcohol

New research highlights that national guidance on safe levels of alcohol consumption is disconnected from the real-life experiences and conceptions of those who drink regularly.

A study from psychology researchers at Oxford Brookes University and the University of Liverpool found that less than 2% of respondents “referred to guidelines as informing their sense of too much alcohol.” and only 4% of respondents to the study referred to long-term health as contributing to their intuitive level of too much. Instead, the vast majority of participants in the study published by *Psychology & Health* stated that thresholds were established through “recognising previous negative states” with “a focus on short term risks of drinking too much alcohol.” As the authors state, this “demonstrates a disconnect between medical conceptions of risk and the experiences that people call on to gauge when to stop drinking.”

The study, entitled ‘My own personal hell: Approaching and exceeding thresholds of too much alcohol’, is the first of its kind to focus on the experiential threshold of what we, as individuals, consider to be too much alcohol consumption.

The research involved 150 participants responding to an online survey about their drinking attitudes and behaviours. Personal thresholds were based on previously experienced embodied states rather than guidelines, or health concerns. Describing the approach to their threshold, 75% of participants fell into two distinct groups. Group 1’s approach was an entirely negative embodied experience (nausea/anxiety) and Group 2’s approach was an entirely positive, embodied experience (relaxed/pleasurable). These groups differed significantly in awareness of alcohol’s effects, agency and self-perceptions, but not on alcohol consumption. Exceeding their threshold was an entirely negative embodied experience for all. These findings illustrate that people are guided by experientially grounded conceptions of consumption. Interventions could target different groups of drinker according to their embodied experience during the approach to ‘too much’ alcohol.

For a greater understanding of this important area, the authors recommend that further research could explore how those with positive and negative perceptions of reaching their personal

drinking thresholds might influence each other within social settings.

Source: *My own personal hell: approaching and exceeding thresholds of too much alcohol*. Mark Burgess, Richard Cooke, Emma L. Davies. *Psychology and Health*, published online: 21 May 2019 open access. doi.org/10.1080/08870446.2019.1616087

## Is there a recent epidemic of women’s drinking in the US ?

In the US, men have historically had higher rates of alcohol consumption than women, though evidence for birth cohort effects on gender differences in alcohol consumption and alcohol-related harm suggests that gender differences may be diminishing.

In a paper published in *Alcohol and Alcoholism*, researchers reviewed studies using U.S. national data that examined trends in alcohol consumption and alcohol-related harm since 2008. The literature on birth cohort effects from varying developmental periods (i.e., adolescence, young adulthood, middle adulthood, and late adulthood) were synthesized and integrated with a focus on gender differences in alcohol consumption.

Findings suggest that recent trends in gender differences in alcohol outcomes are heterogeneous by developmental stage. Among adolescents and young adults, both males and females are rapidly decreasing alcohol consumption, binge and high-intensity drinking, and alcohol-related outcomes, with gender rates converging because males are decreasing consumption faster than females. This pattern does not hold among older adults, however. In middle adulthood, consumption, binge drinking, and alcohol-related harms are increasing, driven largely by increases among women in their 30s and 40s. The trend of increases in consumption that are faster for women than for men appears to continue into older adult years (60 and older) across several studies.

The authors address remaining gaps in the literature and offer directions for future research.

Source: *Is There a Recent Epidemic of Women’s Drinking? A Critical Review of National Studies*. Katherine M. Keyes, Justin Jager, Tatini Mal-Sarkar, Megan E. Patrick et al. *Alcohol and Alcoholism*, first published 10 May 2019. doi.org/10.1111/acer.14082



## School and town factors associated with risky alcohol consumption among Catalan adolescents

A study aimed to describe the contextual school and location factors determining risky alcohol consumption among rural and urban 10th-grade adolescents (15-17 years old) from Catalonia (north-eastern Spain).

1,268 10th-grade adolescents from Catalonia nested in 26 high schools participated in the study. Computerized and self-administrated questionnaires were used to collect information from individual participants. Contextual variables were collected from the Catalan police registers, geocoded sources, and governmental internet databases and by aggregation of answers from the self-administrated questionnaire.

The study results indicate that risky alcohol consumption is higher among rural adolescents (59.3%) than among urban youth (51.1%). Positive expectancies; drunkenness of siblings and friends; and most of the variables indicating accessibility are associated with risky alcohol consumption at the individual level. At the contextual level, the

sports' centre accessibility and the high school's percentage of risky student alcohol consumption were strongly associated with individual risky alcohol consumption. The association between risky drinking and location (rural or urban), the unemployment rate, and the number of pubs and nightclubs were not significant after adjustment by the individual and mediating variables.

The authors conclude that individual factors such as the influence of siblings' and friends' drinking patterns, and more alcohol access opportunities are associated with adolescents' risky alcohol consumption. The associated contextual factors are the sports centre accessibility and the percentage of risky classmate alcohol consumers. Interventions targeting adolescents should focus at community and high school levels, trying to reduce adolescents' accessibility to alcohol.

Source: School and town factors associated with risky alcohol consumption among Catalan adolescents. Obradors-Rial N, Ariza C, Contente X, Muntaner C. *Alcohol*. 2019 May 10. pii: S0741-8329(17)30987-4. doi.org/10.1016/j.alcohol.2019.04.005.

## Patterns of alcohol consumption and alcohol-related harm among European university students

A project compared patterns of alcohol consumption and alcohol-related harm from a survey of university students sampled from universities in Denmark, England, Germany, Italy, Portugal and Switzerland.

A total of 2,191 university students (70% female, 90% white ethnic group, age range 18-25) completed the survey. Participants completed measures of demographic variables (age, age of onset, ethnic group and sex) and the Alcohol Use Disorders Identification Test (AUDIT), which was the primary outcome.

Sixty-three percent of the sample scored negative for harmful drinking on the AUDIT (<8), with 30% categorised as hazardous drinkers, 4% harmful drinkers and 3% with probable dependence. Analysis of variance, including demographic factors as covariates, identified a main effect of country on AUDIT scores. AUDIT scores were highest in England (M = 9.99) and Denmark (M = 9.52) and lowest in Portugal (M = 4.90).

European university students in the sample mainly reported low risk patterns of alcohol consumption and alcohol-related harm. However, students from Northern European countries had significantly higher AUDIT scores compared with students from Central and Southern European countries. The researchers recommend that the present study is replicated using nationally representative samples to estimate the prevalence of alcohol use disorders among university students in different European countries.

Source: Patterns of alcohol consumption and alcohol-related harm among European university students. Cooke R, Beccaria F, Demant J, Fernandes-Jesus M, Fleig L, Negreiros J, Scholz U, de Visser R. *Eur J Public Health*. 2019 May 11. pii: ckz067. doi.org/10.1093/eurpub/ckz067.



## High socioeconomic status predicts substance use and alcohol consumption in U.S. undergraduates

In health sociology, the prevailing consensus is that higher socioeconomic status (SES) lowers illness risk. This model neglects the fact that unhealthy consumption patterns may covary with affluence. A study examined patterns of drugs and alcohol consumption among affluent US college students. The paper published in the *Journal Substance Use and Misuse*, tests the hypothesis that undergraduate students from high-SES households have higher rates and levels of drug and alcohol consumption than their peers.

The study used self-report data from 18,611 18- to 24-year-old undergraduates across 23 public and private U.S. institutions from the Healthy Minds 2016 dataset.

High-SES undergraduates were found to be more likely than peers to use marijuana, choose varied drugs, consume alcohol frequently, and use alcohol and substances to cope with stress. The first three results were robust after controlling for gender, race, residence type, and relationship status. Marital status and race were stronger predictors than SES. Asians and married students were the least likely to use alcohol and drugs.

Findings supported the main hypotheses, and the effects were robust to controls. Consumption of illicit drugs and alcohol may be one hitherto neglected reason for downward mobility among economically privileged college students.

Source: *High Socioeconomic Status Predicts Substance Use and Alcohol Consumption in U.S. Undergraduates*. Chris C. Martin *Substance Use & Misuse*. Volume 54, 2019 - Issue 6, pages 1035-1043, published online: 15 Feb 2019. doi.org/10.1080/10826084.2018.1559193

## The role of sex and age on pre-drinking in 27 countries

A study modelled the impact of sex and age on the prevalence of pre-drinking in 27 countries, Using data from the Global Drug Survey, the percentages of pre-drinkers were estimated for 27 countries from 64,485 respondents. Differences in the percentage of pre-drinking by sex (male and female) and age (16–35 years) between countries was compared.

The estimated percentage of pre-drinkers per country ranged from 17.8% (Greece) to 85.6% (Ireland). The influence of sex and age on pre-drinking showed large variation between the 27 countries. With the exception of Canada and Denmark, higher percentages of males engaged in pre-drinking compared to females at all ages. There was a decline in pre-drinking probability among respondents in all countries after 21 years of age. After the age of 30 this probability remained constant in some countries, but increased in Brazil, Canada, England, Ireland, New Zealand and the United States.

The authors comment that their study adds to the current knowledge of age- and sex-related trends in pre-drinking within and across countries. Increased understanding of the considerable variations in age- and sex-related trends in pre-drinking trends between countries suggest that policy-makers would benefit from increased understanding of the particularities of pre-drinking in their own country to efficiently target harmful pre-drinking behaviours.

Source: *The role of sex and age on pre-drinking: an exploratory international comparison of 27 countries*. Jason Ferris, Cheneal Puljević, Florian Labhart, Adam Winstock, Emmanuel Kuntsche. *Alcohol and Alcoholism*, agz040, open access. doi.org/10.1093/alcalc/agz040

## New Chief Medical Officer appointed for England

The Cabinet Secretary has announced Chris Whitty as the new Chief Medical Officer for England and the UK government's Chief Medical Adviser.

Professor Whitty is currently Chief Scientific Adviser for the Department of Health and Social Care. He has overall responsibility for the department's research and development, including the National Institute for Health Research (NIHR) and life science strategy. He is also the Professor of Public

and International Health at the London School of Hygiene and Tropical Medicine, a practising NHS Consultant Physician in acute medicine and infectious diseases at University College London Hospitals, and Gresham Professor of Physic.

Professor Chris Whitty will replace Professor Dame Sally Davies, the current Chief Medical Officer, when she takes up a new role as master of Trinity College Cambridge in October 2019.



## Alcohol-related emergency hospital admissions in children and adolescents in Wales

A study has identified rates of alcohol-related emergency hospital admissions in children and young people between 10 to 17 years. The reasons for these admissions and their association with socio-demographic factors were also examined.

There were 2,968 alcohol-related emergency hospital admissions from 2006 to 2011 in children and adolescents aged 10 to 17 years in Wales. There was a general decreasing trend from 2006 to 2011 in the number and rate of alcohol-related emergency hospital admissions; the mean age of admission was 15.4 years. In each of the four youngest age groups (10-13,14,15,16 years), females had higher IRRs than males. Males had slightly higher IRR compared to females only in the oldest age group (17 years) and IRRs increased with increasing deprivation. 92% of the admissions lasted one day and 70% occurred during the last three days of the week with a peak on Saturday.

The length of stay in hospital was longer in cases when self-harm was present. Multiple admissions showed high prevalence of serious self-harm cases in females. The number of admissions with injuries and falls were higher for males than females.

Female children and adolescents were more likely to be admitted to hospital for alcohol-related reasons. The authors state that the data illustrate the significant burden of alcohol-related harm in young people and highlight the need for interventions and policies that promote safe drinking practices among young people to prevent future alcohol-related harm during the life-course.

Source: *Epidemiology of alcohol-related emergency hospital admissions in children and adolescents: An e-cohort analysis in Wales in 2006-2011.* Trefan L, Gartner A, Alcock A, Farewell D, Morgan J, Fone D, Paranjothy S. *PLoS One.* 2019 Jun 4;14(6):e0217598. doi.org/10.1371/journal.pone.0217598.

## Road-safety summer campaign launched in Belgium



In Belgium, the summer campaign to raise awareness and curb drunk driving began on 7 June.

The campaign slogan will be the same as that of the winter campaign, "100% BOB, 100% sober", a reference to the designation of Bobs, group members designated to drive their companions home who abstain from alcohol.

"A sole glass can be dangerous," warn campaign actors VSV (Vlaamse Stichting Verkeerskunde), Brussels Mobility, Assuralia (the professional insurers' union), Belgian Breweries and Vias Institute.

In a European study conducted by Vias, 30% of Belgian respondents admitted to driving after

drinking alcohol during the previous one-month period. Only Switzerland and Portugal had higher percentages of drinking drivers.

"Belgian drivers allow themselves to be tempted too often by a glass and then calculate how much more they can drink and remain within the limit," Vias said.

The campaign insists that a BOB must always be selected beforehand so that people can be sure of returning home safely and that the BOB must remain 100% sober.

To raise awareness on the dangers of driving under the influence of alcohol, a poster campaign will run in June in Flanders while alcohol tests will be conducted everywhere else in June, July and August. For the first weekend, federal and local police organised a new alcohol-free weekend with additional tests on the country's roads.

In 2018, one in four Belgians underwent breathalyser tests. During the last summer edition of the BOB campaign, the police ran 324,000 alcohol tests and found that 2.7% of motorists had drunk too much, which was "the best result ever registered."

## EU deal on alcohol excise duties fails to reach agreement

Euractiv reports that EU member states failed to agree on the reform of alcohol excise duties during a meeting of financial ministers in May as the Romanian Presidency of the EU tried to raise the maximum limit on home distillation, in pursuit of its own national interest.

28 finance ministers failed to reach an agreement on the alcohol excise duties directive, as most EU countries were unable to accept the Romanian Presidency's proposal, in particular the part related to moonshine, which aims to regulate local alcohol production.

According to the proposed reform, member states may be exempt from excise duty, or apply reduced rates, for ethyl alcohol distilled from fruit by private

individuals, for their private use. The exemption would be applicable to no more than 50 litres of spirits per year. However, Romania insisted on raising the amount to 100 litres for itself and Hungary.

The discussion took place in the context of the reform of the directive on the structures of excise duty on alcohol as well as general arrangements for excise duty. The aim of the reform is to reduce costs for small producers of alcoholic beverages, clarify rules on excise duties and establishing and EU wide certification scheme concerning small producers. After talks collapsed, the Economic and Financial Affairs Council is now expected to continue discussions to try to reach a compromise.

## Spain drink drive convictions increase

Preliminary data provided by Spain's Attorney General's Office show a 10% rise in convictions for driving under the influence of alcohol or drugs in the past year.

Convictions grew to 56,173 in 2018, compared with 51,085 in 2017, representing 21% of all convictions for any kind of crime. More than 40% of drivers who died in traffic accidents had consumed alcohol or drugs. Pere Navarro, head of the DGT national traffic authority, has ruled out introducing tougher penalties for violators saying that the priority is to increase roadside checks.

Under the previous administration of former Popular Party (PP) Prime Minister Mariano Rajoy alcohol breath tests were reduced by 20% on Spain's roads. In 2013, the Civil Guard screened more than 6.4 million drivers to test the level of alcohol in their bloodstream. Three years later there were 5.07 million tests, and in 2017 there were 5.18 million. The drop in breathalyzer tests was accompanied by a reduction in Civil Guard officers on traffic duty.

In September of last year, Navarro said that 250 more officers would start patrolling the roads in October, and that another 400 would be added in 2019.

## New app. aimed at minors in Spain



'Passport 0,0' is an initiative of the Don Bosco Confederation of Youth Centers of Spain. Funded by the Ministry of Health, Consumption and Social Welfare, the programme aims to combat the consumption of alcoholic beverages by minors

through prevention efforts and education.

The initiative is aimed at adolescents between the ages of 13 and 17, especially those at risk of social

exclusion, whose situation may cause them to be particularly vulnerable to drug use and addiction.

The "Pasaporte 0,0" app., downloadable from Google Play, was created with the intention of being an educational tool that can be used by both educators and adolescents. Its design and development involved youth, parents, social mediators and technical staff.

Complementing the app., other materials have been developed. The website [pasaporte00.org](http://pasaporte00.org) gives more information about the programme and provides materials for organizations to use in their prevention activities.

## Guidelines issued for non-alcoholic drink ads in Ireland

In Ireland new rules for the marketing of non-alcoholic drinks will oblige advertisers to make clear that these “product variants” do not contain alcohol, while the ads should also not appeal to under-18s.

In new guidelines that come into effect immediately, the Advertising Standards Authority for Ireland (ASAI) said “there should be no scope for confusion” over the content of a drink. Consumers should be able to easily identify that the product being advertised is non-alcoholic.

The self-regulatory body said it had been moved to issue the guidelines by the emergence of more non-alcoholic products, which are typically sold by beer companies responding to a fast-growing health-conscious market.

“The market for non-alcohol products has seen an increase in recent years. It’s important that there is no confusion between these products and alcohol products, and that advertising contains no appeal

to children. We have developed these guidelines to help companies who deliver the marketing communications for non-alcohol products.” said Orla Twomey, Chief Executive of the ASAI.

The authority said if there was “absolutely no doubt” that a product variant was non-alcoholic, ads depicting activities considered a risk to personal safety if alcohol was involved were unlikely to be in breach of its code of practice. However, non-alcoholic product variants should not target children through children’s media or via out-of-home advertising sites located close to schools, it warned.

Creative techniques that might “appeal primarily to children” should also not be used in ads, while people drinking in the ads should be aged 25 or over and appear to be so. This is the rule that already applies to ads for alcoholic drinks.

[asai.ie/wp-content/uploads/Advertising-non-alcohol-variants-Effective-June-19.pdf](https://asai.ie/wp-content/uploads/Advertising-non-alcohol-variants-Effective-June-19.pdf)

## UK students shun alcohol-free options



A new report suggests that students in the UK are not drawn to alcohol-free beer and spirits, preferring instead cheaper options such as water or soft drinks.

The report draws on results from a survey which questioned seven

focus groups across six UK locations with a follow-up survey of 1,000 students conducted via student research company YouthSight.

The survey found that being sober has been “normalised” among students. University and college-aged people surveyed in the report said the alcohol-free category is too expensive and “a bit point-less for the price”.

Marketing agency The Hype Collective, which compiled the report said that the students’ responses tie in to wider on-premise trends in which not drinking has become “normalised” among younger consumers. According to the report, 80% of the students surveyed said they would not feel self-conscious about requesting

a non-alcoholic drink in a bar, or feel pressure to drink at all.

Hype Collective creative director Paul Stollery also said students are not drinking alcohol-free beer because unlike older consumers they have not formed any beer-drinking habits. Therefore, alcohol-free beer is ineffective as a replacement.

in the past two years, the UK beer industry has launched a number of alcohol-free products. Heineken rolled out Heineken 0.0 in the country in 2017 and has since pinpointed the UK as one of the drivers of the beer’s global success. According to Heineken, the UK low- and no-alcohol beer category is experiencing annual sales value growth of 24%.

The report challenged assumptions that UK students are not as interested in drinking as previous generations and with more awareness on wellness. The report said students still view the union bar or a nearby pub as the most common location for socialising with friends. And, although they do drink less than students of a decade ago, the decline is from a “very high base”.

[hypecollective.co.uk/files/HypeCollective\\_TheAlcoholIssue.pdf](https://hypecollective.co.uk/files/HypeCollective_TheAlcoholIssue.pdf)

## Drinking habits and attitudes in Ireland



The 2019 Drinkaware Index shows that the majority of Irish adults have little awareness of what constitutes low risk drinking and 19% regularly engage in binge drinking (six or more standard drinks in one sitting). The survey carried out by Behaviour &

Attitudes with a nationally representative sample of 1,000 adults, found that:

- 98% of survey respondents could not identify the HSE weekly low risk alcohol guidelines.
- Weekly drinking is habitual for 44% of Irish adults.
- 24% of Irish drinkers acknowledge that their current drinking levels may cause future health problems.
- 74% agree with the statement that drinking to excess is just a part of Irish culture – this sentiment is shared by all age groups and both sexes.

The report identified two major risk-based groups within the drinking population: hazardous drinkers at increasing risk of dependency (21%) and a group at potential risk of becoming hazardous drinkers (23%).

The research also revealed trends in alcohol consumption in the under-25 age group.

- On average, the current generation of under-25s had their first alcoholic drink at 14.3 years, compared to the national average of 15.5 years.
- Over 34% of under-25s report binge drinking on a weekly basis, vs 18% of the whole drinking population.
- 64% of under-25s drink as a coping mechanism compared to the national average of 50%. Coping mechanisms cited included: 'To cheer you up when you are in a bad mood or stressed'; 'To forget about your problems'; 'Because it helps you when you feel depressed or anxious'.

Men are also identified as more harmful drinkers:

- On average, Irish men who drink, binge drink almost twice a month - 22 times in a year - versus women who do so 10 times a year.
- Of those who drink, 26% of men binge drink

on a weekly basis, compared to only 10% of women.

- Men are twice as likely to feel that they should cut down on their drinking (28%), compared to 14% of women.
- Men are more likely to drink as a coping mechanism (56%) than women (46%).

Commenting, Sheena Horgan, CEO of Drinkaware, said: "The Drinkaware Index research highlights that a significant number of Irish adults are drinking at a level that may be putting their health at risk. Of particular concern is that these drinking habits appear even more embedded among younger people, with 64% of under-25s stating that they often drink as a coping mechanism.

"The 2019 Drinkaware Index has quantified and exposed the collective complacency and cultural acceptance surrounding Irish drinking patterns... To get to the heart of the problem, we need to examine and reassess some of our deep-rooted cultural norms and wide acceptance that we are simply excessive drinkers by virtue of our national heritage."

In response to these findings, Drinkaware is calling for young men in Ireland to make more informed choices around alcohol and improve long-term health and well-being through its campaign 'Change the Trend'.

During Men's Health Week (10-16 June), Drinkaware will be highlighting their new campaign – Change the Trend, to improve the health and well-being of young Irish men.

The campaign will encourage men to reduce binge drinking and follow the HSE's weekly low-risk guideline – 17 standard drinks spread over a week and at least two alcohol-free days.

It also wants to raise awareness of the guidelines and what a standard drink is.

[drinkaware.ie](http://drinkaware.ie)



## European producers sign Memorandum of Understanding to provide energy value information on spirit drinks

spiritsEUROPE has signed a Memorandum of Understanding (MoU) in which the sector commits to provide energy information on labels, with full ingredient listing and detailed product-specific information online. The signature ceremony took place in the presence of EU Health Commissioner Vytenis Andriukaitis during the association's General Assembly meeting in Paris. The MoU is a voluntary agreement that goes well beyond the initial commitments made by the sector in March 2018.

It is estimated that one in four bottles placed on the EU market will include energy information on-label by the end of 2020 – and this should rise to 50% and 66% by the end of 2021 and 2022 respectively.

For online ingredient listing, the sector will go above and beyond existing legislative obligations, committing to indicate raw materials for all mono raw material spirits categories and vodka.

Following negotiations over the past 14 months, conducted under the direction and auspices of EU Commissioner for Health & Food Safety, Vytenis Andriukaitis in the European Commission, the MoU's aim is to put forward a common understanding and formulate a transparent and an ambitious self-regulatory approach that takes into account consumer information needs as well as sector-specific aspects and the existing legal framework.

The signatories – several company members and trade association members signed individually

alongside spiritsEUROPE – will work with the Commission to monitor the impact and effectiveness of the MoU. It is likely that there will be two meetings per year to review progress.

"We are proud about the unique and pioneering commitment signed by the European spirit producers which will provide consumers with the information they are looking for", said Christian Porta, President of spiritsEUROPE.

"Calorie information will appear on the bottles and we'll keep developing comprehensive ingredients and nutritional information through easy-to-use online tools for our customers, so they are further empowered to make informed and responsible choice", he added. "The text agreed today provides European distillers with the necessary clarity and guidance to implement the agreed rules within a highly ambitious timeline," he concluded.

Commissioner Andriukaitis said: "We live in a time where consumers increasingly want to be better informed about what they eat and drink so they can make healthier choices. I am therefore pleased that today the spirits sector makes a leap forward providing Europeans with that very possibility.

I understand that many companies and associations had to get around the table to come up with the plan that I am being presented today. I congratulate the sector for these efforts and call on all producers to implement the MoU's provisions along the agreed parameters and timeline."

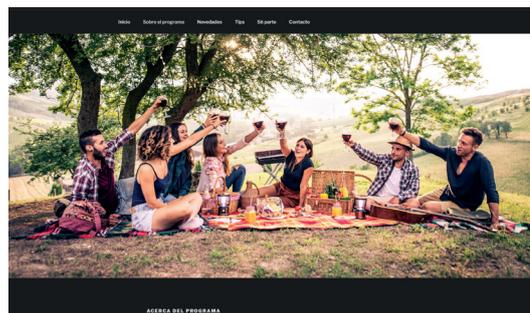
## New Wine in Moderation website in Argentina

A new microsite was recently released in Argentina. Accessible through the Bodegas de Argentina website, the Wine in Moderation Argentina microsite presents the philosophy of the movement, responsible tips as well as the latest information about the actions that are carried out in the country under the international Wine in Moderation Programme.

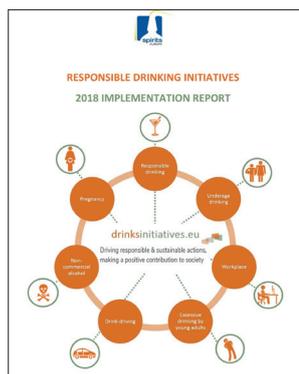
Local Partners and Supporters are listed on the microsite and have access to all relevant information while new potential associates learn more about the programme and why drinking

wine responsibly can be part of a healthy life. Links to the central Wine in Moderation website and the Wine Information Council are also included.

[wim.bodegasdeargentina.org](http://wim.bodegasdeargentina.org)



## Report on responsible drinking initiatives in Europe



In their annual Implementation Report, Spirits Europe reports on prevention efforts at local level in public-private partnerships throughout 2018.

The 2018 Report provides insights into the 119 prevention programmes

that are ongoing across Europe. A majority of these aim to promote responsible drinking, using increasingly social media tools and approaches to reach the right people with the right message at the right time and at the right place. 36 prevention programmes are dedicated to fighting underage drinking. For drink-driving, the use of the designated driver concept has become a widely understood and accepted behaviour among young adults and increasingly so among the older generation. According to Spirits Europe, the pressure of enforcement of rules by police forces has been instrumental to achieve this change in behaviour.

The organisation is supporting gynaecologist unions with tools and materials to raise awareness among women not to drink when pregnant or breastfeeding and also work with pharmacists to amplify responsible drinking messages to fight harmful alcohol consumption.

[spirits.eu/upload/files/CP-AS/CP.AS-025-2019%20responsible%20drinking%20initiatives%20report-%202018.pdf](https://spirits.eu/upload/files/CP-AS/CP.AS-025-2019%20responsible%20drinking%20initiatives%20report-%202018.pdf)

## Drink driving campaign in Brazil

In Brazil, an initiative has been rolled out by Ambev, the Brazilian affiliate of Anheuser-Busch InBev, to talk about the disorienting effects of drinking, and to urge people not to drink and drive.

For the campaign, the letters in the logos of various Ambev beer brands like Budweiser, Stella Artois and Corona have been scrambled. The modified logos appeared in print, digital and outdoor ads, on stadium signage during a major soccer matches, and on actual bottles in bars. Initially consumers thought it was a mistake, which boosted social media sharing, but then, the brand revealed the purpose of the campaign.

Ambev marketing director Alexandre Costa said “We want to invite people who drink beer to reflect: Just as we think the logos are in order at first, and then realise that they are not, there are times when people drink and think everything is in order to drive, when in fact it is not.”

The switch was carried over to Brahma TV advertising spots during the first round of the Brazilian Soccer Championship, with the slogan: “Sometimes you drink and think everything is in order, but it is not”.



## Éduc'alcool shifts focus for next campaign

After five years of promoting low-risk alcohol consumption and three years of promoting the benefits of respecting them, Éduc'alcool is shifting the emphasis of its campaigning for the next three years.

More than eight out of ten Quebecers now know the recommended daily alcohol consumption limits. The limits of two and three glasses for women and men are now a social norm. In addition, more than 90% of Quebecers agree that respecting the recommended limits allows them to better control their weight, to have a better quality of sleep, to avoid a hangover and be in better shape.

The most recent wave of the Éduc'alcool campaign achieved good results: 70% of Quebecers were reached by the campaign.

Éduc'alcool is to transition to phase 3 of their strategic plan: giving Quebecers tools to help them respect these limits. The organisation says that it already has all the necessary tools: the website; the Calculator; Alternalcool; and all the publications on alcohol and health. The company's future initiatives will reposition Éduc'alcool from being an organization that speaks of moderation to Quebecers to that of an organization that helps them put moderation into practice.

## European brewers ahead of schedule with improved ingredients and calorie labelling

The Brewers of Europe have announced that 60% of beers sold in Europe now include calorie information on their labels.

Brewers have been voluntarily rolling out ingredients listing and energy information in full accordance with EU law, on-label and online, since 2015. In July 2018 the commitment was bolstered with a recommendation to all breweries to list ingredients and calories on the labels of pre-packaged beer containers (bottles, cans etc.). In addition to beating the target on energy information, 85% of beers in Europe now also label their ingredients.

The Brewers of Europe, representing the interests of over 9,500 breweries, is now into the fifth year of its push towards greater transparency and better information for consumers. Although there is still an EU level exemption for alcoholic beverages above 1.2% abv from any legal obligation to provide this information, brewers are voluntarily implementing the labelling rules laid down in the EU's general regulation on food information to consumers.

EU Health Commissioner Vytenis Andriukaitis said "I welcome brewers' commitment to provide

the full list of ingredients and the energy values per 100ml on the labels of all pre-pack beers. The EU Regulation sets the rules to follow and I'm delighted that brewers are fulfilling these high standards. This is in the interest of public health and consumers information".

Pierre-Olivier Bergeron, Secretary General of The Brewers of Europe, added, "we are ahead of schedule in fulfilling our landmark voluntary commitment. Today no less than 85% of our beers in the EU label their ingredients and 60% of pre-packed beers label calorie information, per 100ml, the legal reference volume for all drinks, alcoholic or not".

The Brewers of Europe state that they will continue reporting on roll-out and inviting the other alcoholic beverage sectors to follow their lead, in order to ensure consumers, receive understandable, recognisable, comparable and accurate information for all drinks.

[beerwisdom.eu](http://beerwisdom.eu)



## NFL in the US eases up on advertising restrictions

The National Football League has said it will allow active players to appear in beer adverts and that it will ease the current restrictions on wine and spirits companies becoming 'official sponsors' of franchises.

The National Football League (NFL) is set to announce that beer brands partnered with teams (principally AB InBev's Bud Light), will be allowed to use active players in its advertising. Some restrictions remain, however. Only active players may be used for example and it must not appear that the players are endorsing the product advertised. If a brand wishes to use more than one player for a campaign, then they must use a minimum of six. Any brand wishing to sign a sponsorship deal with a player or players must sponsor his team (or their teams) and all action shots of players in uniform used must come from licenced Associated Press photographs. Players

signed to sponsorship deals will receive a fee as well.

Although wine and spirit brands will not be able to use NFL athletes to promote their products, the regulations for those companies have still been relaxed.

Spirit brands will be able to use team logos on their materials for the first time. Wine brands, meanwhile, will be able to do so without commemorating a landmark club event, such as a championship anniversary, as they had to in the past.

Other major leagues in the US, notably the NBA and MLB eased up on their alcohol advertising restrictions last season and feedback from these leagues is reportedly what has, in part, prompted the NFL to go ahead with its own changes.

The new rules will be in effect from the 2019 season, which begins this autumn, and will be re-assessed on a yearly basis.

## Australian programme commits to educate players, clubs and fans about drinking in moderation

DrinkWise in Australia has announced a new partnership with the National Rugby League (NRL) for 2019 in which they will seek to promote responsible attitudes and behaviours towards alcohol consumption.

Central to the partnership will be a new education programme designed to educate up to 4,000 players, as well as other officials within NRL clubs and fans about the importance of drinking in moderation.

The partnership also includes an advisory role where a senior DrinkWise representative will sit on one of the NRL's Wellbeing and Education advisory groups specifically focused on drug, alcohol and gambling issues.

The DrinkWise education sessions will be conducted with all 16 NRL clubs, 26 State Cup clubs and junior teams. DrinkWise will also be offering presentations at rookie camps on an ongoing basis, ensuring players are supported at every stage of the elite pathway.

DrinkWise CEO, Simon Strahan said, "DrinkWise is all about driving behavioural change when it comes to consumption of alcohol and making healthy life choices and we see a huge opportunity with the NRL."

"Through education, the aim is for everyone to make better decisions, to celebrate and enjoy the game for what happens on field, rather than what happens off it." Mr Strahan said.

NRL CEO, Todd Greenberg said, "The DrinkWise education program will not just benefit the players, but the entire NRL community."

"We are committed as a game to ensuring all our players, whatever their age or stage of playing career, are supported in making better decisions and this partnership with DrinkWise is a key component of this process."

To launch the education programme, DrinkWise teamed up with NRL legend, Wally Lewis, as well as some of the leagues current stars, James Tedesco (Sydney Roosters) and Tepai Moeroa (Parramatta Eels), as custodians of their message and to feature in a TV advertisement that continues to communicate DrinkWise's 'You won't miss a moment if you DrinkWise' message when it comes to consuming alcohol and sport.

The TV advertisement follows a fan who wakes up in house after a big night and is surprised to find some of his idols in his house recapping memorable moments from the previous night's game. He seems unaware of what they are talking about, causing him to reflect on his drinking habits.

The TV advertisement airs on Channel 9 from Friday 24th May.

[drinkwise.org.au/media-releases/media-releases-2019/drinkwise-announces-new-partnership-with-nrl-2/#](http://drinkwise.org.au/media-releases/media-releases-2019/drinkwise-announces-new-partnership-with-nrl-2/#)



## Estonia implements controls over sale of alcohol

Legislation has been implemented in Estonia to restrict the display of alcoholic drinks in shops, which will both separate them from other products, and restrict their visibility from outside the point of sale. The legislation, effective from 1 June, also includes restricting product visibility

from the rest of the sales area once inside a store, unless that store's size makes this impractical. The Consumer Protection and Technical Regulatory Authority in Estonia will supervise compliance with the new regulations and is to advise retailers how they go about setting up their stores.

## Worldwide alcohol consumption declines by 1.6% in 2018

IWSR 2018 global beverage alcohol data shows an overall decline of 1.6%, with a growth in spirits, but beer and wine volume are down. IWSR alcohol predict that the alcohol market will grow by 3% over next 5 years.

Beverage alcohol drinkers worldwide consumed a total of 27.6 bn nine-litre cases of alcohol in 2018, but while that number represents a decrease of -1.6% from the year prior, new data from the IWSR forecasts that total alcohol consumption will steadily increase over the next five years, to 28.5bn cases in 2023. In terms of retail value, the global market for beverage alcohol in 2018 was just over \$1tn and IWSR expects this figure to grow 7% by 2023 as consumers continue to trade up to higher-quality products. The IWSR Drinks Market Analysis Global Database also shows:

The largest gain in global beverage alcohol consumption in 2018 was in the gin category, which grew by 8.3% since 2017. In the UK, gin was up 32.5% in 2018, and the Philippines recorded growth of 8%. The gin category is expected to reach 88.4m cases globally, with particular strong growth in key markets such as the UK, Philippines, South Africa, Brazil, Uganda, Germany, Australia, Italy, Canada and France.

Consumption of Whisky and Agave-Based Spirits continues to increase due to innovation in whisky cocktails and highballs, the global whisky category increased by 7% last year, up strongly in India (10.5%) the US (5%) and Japan(8%).

The mixed drinks category (which includes premixed cocktails, long drinks, and flavoured alcoholic beverages) grew 5% globally in 2018. In the cider category investment levels in those products continue to rise, with a 2.0% growth for 2018-2023. Both the mixed drinks and cider categories are taking share from beer as perceived accessibility increases (less bitter, easier to drink.)

Vodka lost volume in 2018 (-2.6%) as the market for lower-priced brands continued to decline in Russia and the Ukraine. Higher-priced vodkas, however, showed a more positive trend. The outlook for total vodka over the next five years remains slow with a forecast of -1.7% growth in 2018-2023.

Beer continued to lose volume in 2018, declining by -2.2% in 2018, impacted greatly from volume decreases in China (-13%). Other large markets such as the US and Brazil also fell (-1.6% and -2.3%, respectively), while Mexico and Germany saw growth (6.6% and 1%, respectively). The beer category is expected to show a slight increase in 2019 and to grow 0.7% in 2018-2023.

Wine, which had posted strong global growth in 2017, lost-1.6% in volume in 2018 as wine consumption declined in major markets such as China, Italy, France, Germany and Spain (the US market was flat). However, though consumers are drinking less wine, they're increasingly drinking better –pushing wine value to increase. The sparkling wine category is expected to show a five-year growth of 1.17% 2018-2023, driven in large part by prosecco.

Low-and no-alcohol brands are showing significant growth in key markets as consumers continue to seek 'better-for-you' products and explore ways to reduce their alcohol intake. Growth for 2018-2023 is expected to be 8.8% for no-alcohol beer, and 2.8% for low-alcohol beer. No-alcohol still wine is forecasted grow by 13.5%, and low-alcohol still wine by 5.6%. Growth of no-alcohol mixed drinks is predicted to be 8.6%.

[theiwsr.com/wp-content/uploads/Press-Release-IWSR-Releases-New-Global-Data\\_29May19.pdf](http://theiwsr.com/wp-content/uploads/Press-Release-IWSR-Releases-New-Global-Data_29May19.pdf)

### How to write about drinking responsibly

A project of the Harvard Kennedy School's Shorenstein Center and the Carnegie-Knight Initiative, Journalist's Resource are sharing eight tips on how journalists can improve their coverage of alcohol, based on suggestions from journalists and researchers with subject-area expertise.

[journalistsresource.org/tip-sheets/8-tips-reporting-alcohol-drinking/](http://journalistsresource.org/tip-sheets/8-tips-reporting-alcohol-drinking/)



## 'It Starts Today' programme evaluation in South Africa



In South Africa, the 'It Starts Today' programme aims to educate learners on the harms associated with alcohol use and to change adolescents' behaviours and perceptions pertaining to alcohol use.

A pilot programme, targeted school-going youth residing in the two communities in the two provinces. The Human Science Research Council (HSRC) assessed the usefulness of the programme in changing learners' perceptions, attitudes and behaviours related to underage drinking.

Their study evaluated whether the structured Life-Orientation (LO) programme facilitated changes to participants' perceptions, attitudes and behaviours related to underage drinking. Specifically, the programme intended to promote a 'say no to alcohol' attitude amongst learners by decreasing learner consumption of alcohol, decreasing positive attitudes towards alcohol use and other risk behaviours, enhancing knowledge on the social harms/impacts associated with alcohol use, and enhancing learner self-esteem and goal setting.

The findings of the assessment showed that the programme did not successfully facilitate changes in relation to all programme outcomes, although sub-sections of the results indicated some changes in the learners' perceptions, attitudes and behaviours between baseline and endline, these changes were not found to be statistically significant.

Aware.org state that therefore, the programme needs to be adapted. However, adolescent directed programmes and interventions for alcohol use remain extremely important to not only prevent the development of harmful drinking behaviour during adolescence, but also to interrupt pathways into adult alcohol use and dependence.

Recent evidence shows that adolescent alcohol use trajectories predict alcohol misuse in early adulthood. Therefore, the recommendations are posed with the intention to encourage the development of an informed adolescent programme to interrupt underage drinking in high risk communities.

[aware.org.za/wp-content/uploads/2019/04/ARA-A5-2019-Website.pdf](http://aware.org.za/wp-content/uploads/2019/04/ARA-A5-2019-Website.pdf)

## Diageo partners with MTV on 'sensible' drinking campaign

Diageo has launched a campaign designed to encourage responsible drinking in partnership with MTV International.

On 3 June, the first of a planned series of videos entitled 'Weekend Not Wasted' debuted on a number of media platforms, including MTV's website, YouTube and other social media channels. The second episode will premiere a week later and the final video will go on-air 19th June.



The videos are targeted at the 18-24-year-old demographic, with a goal of reaching over 12 million people on social media, plus 52 million TV households across the UK, Spain, Denmark and Germany. They will run on MTV's website, YouTube and social channels as well as being promoted on the brand's localised TV channels.

Presenters Becca Dudley, Harriet Rose and Samuel Eni discuss hangover-induced anxiety and promote the benefits of moderate drinking, emphasising opportunities to "seize the day".

John Kennedy, president Europe, Turkey and India at Diageo, said: "In creating this campaign, we have married our unique marketing insight with the reach and influence of MTV to land the message that excessive consumption of alcohol can prevent you from achieving the most out of your day."

## Alcohol sales decline following the implementation of a minimum price for alcohol in Scotland

The latest annual report from the Monitoring and Evaluating Scotland's Alcohol Strategy (MESAS) work programme was published 19 June. The report gives the latest analyses of alcohol retail sales and price data in Scotland and England & Wales in addition to trends in other important indicators of alcohol consumption and related health and social harms.

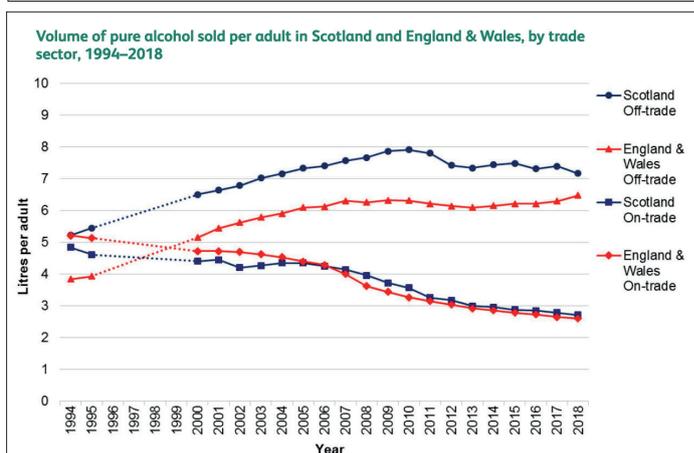
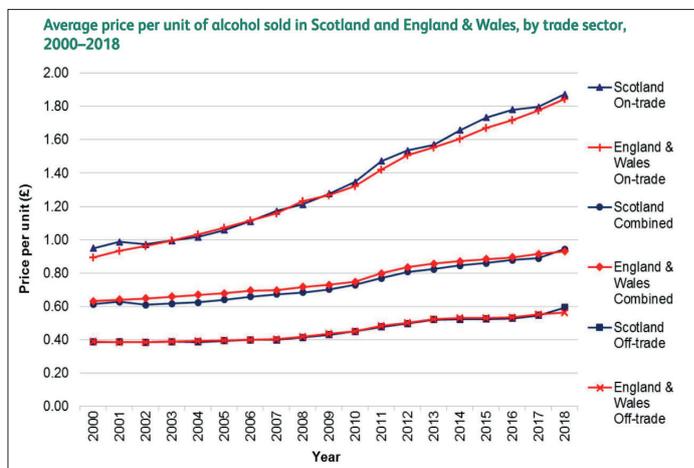
The report presents the first available alcohol sales and price data since the implementation of a minimum price at which a unit of alcohol can be sold in Scotland on 1 May 2018. The minimum unit price is currently set at 50 pence per unit.

Alcohol sales and price data contained within the report are presented by calendar year and therefore 2018 data includes a four-month pre- and eight-month post-MUP period. The data for self-report consumption, alcohol-specific deaths, alcohol-related hospital admissions and social harms are for periods occurring entirely before the implementation of MUP.

- In 2018, 9.9 litres (L) of pure alcohol were sold per adult in Scotland, equivalent to 19.0 units per adult per week. This is the lowest level seen in Scotland over the available time series.
- The volume of pure alcohol sold in Scotland in 2018 was 9% higher than in England & Wales, the smallest difference since 2003. This is primarily due to the most recent data point; between 2017 and 2018 per adult sales fell in Scotland while they rose in England & Wales.
- In 2018, the average price of alcohol sold in the off-trade in Scotland was 59 pence per unit, an increase from 55ppu in 2017; in England & Wales the average off-trade price was 56ppu (55ppu in 2017). The average on-trade price in Scotland was £1.87, an increase from £1.80 in 2017; in England & Wales the average on-trade price was £1.84 (£1.78 in 2017).
- In Scotland in 2018 just under a quarter of all off-trade alcohol (23%) was sold at below 50ppu; this fell from 47% in 2017. In England & Wales 42% of all off-trade alcohol was sold at below 50ppu (45% in 2017).

- Self-reported alcohol consumption data show that 24% of adults in Scotland in 2017 exceeded the revised low-risk weekly drinking guideline for both men and women, a decline from 34% in 2003. Of those exceeding the guideline, mean weekly consumption was highest among those in the lowest income groups.
- In 2017, 1,120 people died in Scotland due to a cause wholly attributable to alcohol. Since 2012 the rate of death from alcohol-specific causes has risen overall for both men and women. Alcohol-specific death rates are consistently higher in Scotland than in England & Wales.
- Rates of alcohol-specific death and alcohol-related hospital stays were more than twice as high in men as in women and were highest in the 55–64 year age group.
- Rates of driving under the influence of alcohol have been relatively flat in recent years. Rates of 'drunkenness and other disorderly conduct' offences have fallen since 2013/14.

[healthscotland.scot/media/2587/mesas-monitoring-report-2019.pdf](http://healthscotland.scot/media/2587/mesas-monitoring-report-2019.pdf)



## Finland – New legislation yet to show effect on consumption

The Helsinki Times reports that so far, no major changes have been observed in alcohol consumption following the adoption of a new alcohol act in Finland in April 2018.

The National Institute for Health and Welfare (THL) reported that the adoption of the act – which introduced stronger beverages to the shelves of grocery shops – appears to have brought about a slight increase in alcohol consumption, reversing its long-term downward trend.

Pia Mäkelä, a research professor at THL, commented that “Pricing is probably the most significant reason for the smaller-than-estimated change... Taloustutkimus and the Finnish Grocery Trade Association predicted that the prices of ciders and long drinks would fall by 40%. Also THL estimated that the discount pricing of these

products would make them competitively priced compared to low-cost beer. We fell well short of this at least in the first year, which is excellent news for public health,” she added.

In evaluating the effects of the legislative change, THL took into account a number of factors that have been shown to affect alcohol consumption, including summer weather, tax increases, and the storage and economic situation. It concluded that the legislative change alone has led to a 1.9% rise in alcohol consumption, but added that the estimate is not statistically significant as it falls within the range of statistical fluctuation.

The Finnish government proposed that the effects of the legislative amendment be evaluated three years after its implementation. Mäkelä underlined that final conclusions about the impact of the amendment cannot be drawn for several years.

## DNA of ancient grape seed identifies links with modern vines

Researchers have matched DNA from 28 grape seeds from Iron Age, Roman and medieval archaeological sites across France to a genetic database of modern grapevines.

It has long been suspected that some grape varieties used in modern wine are identical to plants grown hundreds of years ago, as grape vines are propagated by taking cuttings, allowing grapes behind particularly good wines to be passed down the generations.

DNA from some ancient grape seeds shows the grapevine behind a local vintage has been cultivated continuously for 900 years. “We found one medieval grape seed from central France that is directly connected to Savignin blanc,” said

Dr Nathan Wales, from the University of York. It’s a type of grape that’s grown today in France and we see that it has a direct link for 900 years, which means that people have taken this one vine and they’ve propagated it by cuttings for over 900 years.”

Grapes found at archaeological sites also reveal what the Romans grew in their vineyards 2,000 years ago. With the Roman grape seeds, the researchers could not find an identical genetic match with modern-day seeds - but they did find a very close relationship with two important grape families used to produce high quality wine, including Syrah and Pinot Noir.

The research is published in Nature Plants.

## National Wastewater Drug Monitoring Programme in Australia

The Australian Criminal Intelligence Commission released the seventh report of the National Wastewater Drug Monitoring Programme in June, revealing the average consumption of MDMA in both capital city and regional sites and average heroin consumption in capital city sites increased to the highest levels recorded by the programme. Nicotine and alcohol remain the highest consumed drugs measured by the programme, with methylamphetamine remaining the highest

consumed illicit drug of those tested in the country. Australian Criminal Intelligence Commission Chief Executive Officer, Mr Michael Phelan APM said the National Wastewater Drug Monitoring Programme gives valuable insight into the trends and emerging issues of drug consumption across Australia and can identify new sources of threat. [acic.govcms.gov.au/media-centre/media-releases-and-statements/seventh-report-national-wastewater-drug-monitoring-program-reveals-high-levels-mdma-and-heroin](http://acic.govcms.gov.au/media-centre/media-releases-and-statements/seventh-report-national-wastewater-drug-monitoring-program-reveals-high-levels-mdma-and-heroin)



**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, charities, companies and associations to create programmes, materials and policies built around the responsible consumption of alcohol.

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

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

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