

## Contents

Vol. 53 No.2 November 2019

(Click on an item/ page no. to be taken directly to your choice of article)

**News from around the world****Medical News**

Could sleep, exercise and alcohol help to prevent Parkinson's and Alzheimer's?

Adherence to the mediterranean diet and bone fracture risk in middle-aged women

The relation of alcohol consumption to the development of dementia, with very extensive evaluations of the latter

Experimental and observational studies on alcohol use and dietary intake

Conceptualising alcohol consumption in relation to long-term health conditions

Effects of red wine consumption on gut microbiota that affect health and disease

Lifetime drinking trajectories and nonfatal acute myocardial infarction

Mediterranean dietary pattern and skin cancer risk: A prospective cohort study in French women

Links between teenage anxiety and later harmful drinking

Phage therapy shows promise for treating alcoholic liver disease

Untangling the two-way relationship between red wine polyphenols and gut microbiota  
BBC article - Can wine ever be good for you?

**Social and Policy News**

Years of education may impact drinking behaviour and risk of alcohol dependence

Marriage and reductions in men's alcohol, tobacco, and cannabis use

A systematic review of parent based programmes to prevent or reduce alcohol consumption in adolescents

The long-term effectiveness of a social norming campaign to reduce high risk drinking at Michigan State University

Are trends in alcohol consumption and cause-specific mortality in Russia between 1990 and 2017 the result of alcohol policy measures?

Rise in number of children admitted to hospital over their drinking in Ireland

Alcohol consumption among spanish female adolescents

2	Alcohol and illicit drugs in drivers involved in road traffic crashes in Italy	
	What people say about alcohol online differs from what they say in real life	
3	Why is adolescent drinking declining?	19
	Socioeconomic status and alcohol use disorders across the lifespan	
4	Alcohol consumption and consequences in adolescents in 68 low and middle-income countries	20
8	Age trends in alcohol use behaviour patterns among U.S. adults ages 18-65	
	Public health cuts in England have hit poorest areas the hardest	21
9	UK alcohol clinical guidelines to be developed	
	Support in the UK for a new Alcohol Strategy	
12	Minimum price for alcohol in Wales	22
13	Public alcohol ban by-law bid gathers 'mixed' response in Borders	
	A quarter of motorists say new drink-driving laws in Ireland have influenced their behaviour	
14	European Society for Prevention Research publishes position on ineffective and potentially harmful approaches in substance use prevention	23
15	Utah raises its restriction on the sale of beer	
	'Talking Clear' responsibility programme in Portugal	24
	Campaign promotes zero consumption in pregnant women and nursing mothers in Spain	
16	Substance misuse in England 2018/19	
	Ontario government planning several changes to alcohol legislation	25
	Minimum pricing in Kenya	
	Éduc'alcool launches its latest campaign on pregnancy and drinking	
17	Vietnam – Alcohol law to be implemented from 2020	26
	US legislation could require new vehicles to have alcohol detectors	
	Deutsche Weinakademie advertising seminar	
	Health at a Glance 2019 OECD Indicators	27
	Uganda approves Alcohol Control Policy	28
18	Web-based consultation on the implementation of the WHO global strategy to reduce the harmful use of alcohol	

**AIM Digest**  
**Frampton House**  
**Frampton, Dorchester**  
**Dorset DT2 9NH**  
 T: +44 (0)1300 320 869  
 E: [info@aim-digest.com](mailto:info@aim-digest.com)

**Websites:**

[www.alcoholinmoderation.com](http://www.alcoholinmoderation.com)  
[www.drinkingandyou.com](http://www.drinkingandyou.com)  
[www.alcoholresearchforum.org](http://www.alcoholresearchforum.org)

**AIM Subscription Levels:**

**Individual:** GBP 900-  
 USD 1,250-  
 Euro 1000-

**Silver:** GBP 1,500-  
 USD 2,500-  
 Euro 2,000-

**Gold:** GBP £3,000-  
 USD 5,000-  
 Euro 4,000-

**Platinum:** available on request.  
 Please contact [Sherry.Webster@aim-digest.com](mailto:Sherry.Webster@aim-digest.com) for information about AIM's subscription levels.  
 Please make cheques/drafts in British pounds sterling, dollars or Euros payable to AIM Digest at the above address

Helena Conibear – **Executive Director**  
 T: +44 (0)1300 320 869  
 E: [helena.conibear@aim-digest.com](mailto:helena.conibear@aim-digest.com)

Alison Rees – **Editor**  
 E: [alison.rees@aim-digest.com](mailto:alison.rees@aim-digest.com)

Sherry Webster – **Finance and Subscriptions**  
 E: [sherry.webster@aim-digest.com](mailto:sherry.webster@aim-digest.com)

The publisher takes reasonable care to ensure the accuracy of quotations and other information contained herein, but is not responsible for any errors or omissions. Opinions and recommendations quoted herein are usually excerpted, digested or condensed, may be edited for continuity, and are only part of the opinions and recommendations expressed in the original sources, which should be consulted for details.

© AIM Digest 2001. All rights reserved.  
 Material may be reproduced with attribution to AIM.

## Estonia

Tallinn City Government has approved limiting the hours of alcohol sales at entertainment facilities from June 1 next year. Retail sale of alcohol at bars, restaurants, pubs, and nightclubs would be prohibited from 2 a.m. to 6 a.m. most nights preceding a work day. On Friday and Saturday nights, through to Saturday and Sunday mornings, sales will be allowed to continue an hour later, to 3 a.m., but will then be barred until 7 a.m. the following morning. The regulations have yet to pass a vote at the council chamber.

## France

In France, an amendment to tax wine-based premixed drinks was adopted on 15 October by the National Assembly's Social Affairs Committee and on 25 October at a first reading of the draft law on Social Security. The amendment by Senator Audrey Dufeu Schubert from Nantes includes flavoured wines in the premix tax adopted in 2004 (3 euros per decilitre of pure alcohol).

"Extending premix taxation to include wine-based drinks seems essential to me, from both a public health and fair tax perspective", commented Schubert at the committee meeting, specifying that she is excluding "terroir wines such as perries and cider" from the scope of the amendment. The amendment also clarifies that "wine-based premixes [are] overwhelmingly made from foreign wines and the taxation would therefore only marginally affect French producers".

## South Korea

The South Korean government is seeking to ban local distilleries from using images of celebrities on bottles and cans to promote their products.

South Korea's Ministry of Health and Welfare is enforcing the ban in an effort to stop the consumption of alcohol being glamourised. The current law allows photos of celebrities to appear on bottles of soju, beer and other drinks. The ban comes after the South Korea government faced criticism for its lax attitude towards drinking in comparison to its stance on smoking.

## Ireland

A ban on alcohol advertising within 200 metres of a school, creche or a local authority playground came into effect on 12th November in Ireland. The ban is also extended to advertisements on public service vehicles including buses, trains, at bus stops and train stations. Ads for alcohol products will also be banned in cinemas except where films are for those over 18 or where cinemas have licensed premises.

Minister for Health, Simon Harris commented that "these and other measures in the Public Health (Alcohol) Act will effect practical changes in our society in order to ensure that there will be no room for alcohol and alcohol advertising in Irish childhoods".

Harris is also expected to introduce further restrictions on the visibility of alcohol sales in supermarkets next year.



## Could sleep, exercise and alcohol help to prevent Parkinson's and Alzheimer's?

A new partnership between two leading medical research charities in the UK was launched on 1st November to explore how improving the brain's waste disposal system could be the key to preventing Parkinson's and Alzheimer's disease.

The glymphatic system, a recently discovered brain-wide pathway, works to remove waste products from the brain. Parkinson's UK and Alzheimer's Research UK have teamed up for a pioneering three-year project to find out whether boosting this system could help to clear toxic proteins, tau and alpha-synuclein, involved in Alzheimer's and Parkinson's.

The project will be led by Dr Ian Harrison at the Centre for Advanced Biomedical Imaging at UCL. Previous research has shown that sleep, exercise and low levels of alcohol may help the glymphatic system to clear out toxic proteins in the cerebrospinal fluid of mice. This new research aims to build on these findings, testing the impact of these factors in speeding up the glymphatic function in mouse models, as well as the effect of a potential new drug.

The mouse models will be specifically designed so the spread of alpha-synuclein and tau throughout the brain can be tracked. Small amounts of the toxic proteins will be injected into the mice, before using drugs to block the glymphatic system to find out how it affects the spread of the proteins.

By then testing a range of therapies to speed up the glymphatic system, their impact in the spread of alpha-synuclein and tau can be measured, along with the impact on movement-based and memory-based symptoms in the mouse models.

By understanding how the glymphatic system affects the accumulation and spread of proteins in the brain, and by finding a way to boost its function, it could lead to treatments that can target an important cause of both Parkinson's and Alzheimer's.

Dr Ian Harrison of UCL said: "Studying how the glymphatic system affects the clearance of two distinct protein species that both accumulate in the brain and cause neurodegeneration means we'll be able to understand how best to harness the power of the system. This will hopefully allow us to provide a new therapeutic target for treatment of the conditions.

"The funding of the project by Alzheimer's Research UK and Parkinson's UK will allow tandem investigation of both proteins in both neurological disorders, ultimately speeding up research in two closely related fields, and the hope in finding a way to slow down or stop the progression of both Parkinson's and Alzheimer's."

[parkinsons.org.uk/news/could-sleep-exercise-and-alcohol-boost-waste-disposal-brain-prevent-parkinsons-and-alzheimers](http://parkinsons.org.uk/news/could-sleep-exercise-and-alcohol-boost-waste-disposal-brain-prevent-parkinsons-and-alzheimers)

## Adherence to the mediterranean diet and bone fracture risk in middle-aged women

The prevention of bone mass loss and related complications associated with osteoporosis is a significant public health issue. The Mediterranean diet (MD) is favourably associated with bone health, a potentially modifiable risk factor.

A study was conducted with the objective in order to determine MD adherence in a sample of women with and without osteoporosis. The observational case-control study included 139 women (64 women with and 75 without osteoporosis) and was conducted in a primary-care health centre in Girona (Spain). MD adherence, lifestyle, physical exercise, tobacco and alcohol consumption, pathological antecedents, and FRAX (a tool to evaluate fracture risk and bone mineral density) index scores were analysed.

Logistic multilinear regression modeling was used to explore the relationship between the MD and bone fracture risk. The results indicated that better MD adherence was associated with a lower bone fracture risk. Non-pharmacological preventive strategies to reduce bone fracture risk were also reviewed to explore the role of lifestyle and diet in bone mass maintenance and bone fracture prevention.

**Source:** Adherence to the Mediterranean Diet and Bone Fracture Risk in Middle-Aged Women: A Case Control Study. Palomerias-Vilches A, Viñals-Mayolas E, Bou-Mias C, et al. *Nutrients*. 2019 Oct 18;11(10). pii: E2508. doi: [org/10.3390/nu11102508](https://doi.org/10.3390/nu11102508).



## The relation of alcohol consumption to the development of dementia, with very extensive evaluations of the latter

Koch M, Fitzpatrick AL, Rapp SR, Nahin RL, Williamson JD, Lopez OL, et al. Alcohol Consumption and Risk of Dementia and Cognitive Decline Among Older Adults With or Without Mild Cognitive Impairment. JAMA Network Open 2019;2(9):e1910319.

[doi.org/10.1001/jamanetworkopen.2019.10319](https://doi.org/10.1001/jamanetworkopen.2019.10319)

### Authors' Abstract

**Importance:** Substantial heterogeneity and uncertainty exist in the observed associations between alcohol consumption and dementia.

**Objective:** To assess the association between alcohol consumption and dementia and the roles of mild cognitive impairment (MCI) and apolipoprotein Eε4 (APOEε4) genotype in modifying this association.

**Design, setting and participants:** This cohort study used data from the Ginkgo Evaluation of Memory Study, conducted from 2000 to 2008 among US community-dwelling participants. This study analyzed 3,021 participants aged 72 years and older who were free of dementia. Data analysis was performed from 2017 to 2018.

**Exposures:** Self-reported alcohol consumption, drinking frequency, and quantity

**Main outcomes and measures:** Using multivariable proportional hazards regression and linear mixed models, the risk of dementia and the rate of change over time in the Modified Mini-Mental State Examination were estimated.

**Results:** Among 3,021 participants, the median (interquartile range) age was 78 (76-80) years; 1,395 (46.2%) were female. During a median (interquartile range) follow-up of 6.0 (4.9-6.5) years, 512 cases of dementia occurred. For 7.1 to 14.0 drinks per week compared with less than 1.0 drink per week, the hazard ratios for dementia were 0.63 (95% CI, 0.38-1.06) among 2,548 participants without MCI and 0.93 (95% CI, 0.47-1.84) among 473 participants with MCI. Among participants with MCI, the hazard ratio for dementia was 1.72 (95% CI, 0.87-3.40) for more than 14.0 drinks per week compared with less than 1.0 drink per week. The association of alcohol intake with dementia differed for participants with and without baseline MCI (P for interaction=.03). Among participants without MCI, daily low-quantity drinking was associated with lower dementia risk than infrequent higher quantity drinking (hazard ratio, 0.45; 95% CI, 0.23-0.89; P=.02). Findings were consistent when stratified by sex, age, and APOEε4 genotype. Compared with drinking less than 1.0 drink per week, complete abstinence (in

participants without MCI) and the consumption of more than 14.0 drinks per week (in participants with MCI) were associated with lower Modified Mini-Mental State Examination scores (mean difference at follow-up compared with baseline, -0.46 point [95%CI,-0.87 to -0.04 point] and -3.51 points [95% CI, -5.75 to -1.27 points], respectively).

**Conclusions and relevance:** In this study, complete abstinence and consuming more than 14.0 drinks per week (compared with drinking <1.0 drink per week) were associated with lower cognitive scores among participants aged 72 years and older. Particular caution is needed among individuals with MCI who continue to drink alcohol.

### Forum comments

While many previous studies have shown that moderate drinkers appear to have a lower risk of developing dementia, Forum members consider this to be an important paper for several reasons:

1. It focuses on elderly subjects, with a median age of 78 years, an age group with limited previous research and in which the development of dementia is common.
2. It provides a very complete and careful attention to the assessment of cognitive function, as subjects underwent numerous and repeated cognitive assessments. For example, if there was any suggestion of cognitive impairment, cerebral magnetic resonance imaging and referral to an expert panel of clinicians, who reviewed and validated presence of dementia, was carried out.
3. There was an assessment of both the amount and frequency of alcohol intake; also, the authors used HDL and APOA levels to validate reported alcohol intake (associations had  $p < 0.001$  for both) and did sensitivity analyses such as testing for competing causes of death (12-13% of subjects died during follow up).
4. There was a very broad assessment of potential confounders, including body weight, smoking, diabetes, cardiovascular and other diseases, depression, race, ethnicity, clinic site, educational level, social activity, medication use, and genotype for APOE-E4.

The key finding for the large majority of participants, those without mild cognitive impairment at baseline (n=2,548), was that complete abstinence from alcohol was associated



with a higher risk of dementia than seen in any of the groups consuming alcohol. For 473 subjects with MCI at baseline, there was no effect on risk of dementia for up to about 10 drinks/week, then a slight but insignificant increase in risk with greater intake. The authors state that the group found to have the highest risk of dementia was the group with MCI at baseline that consumed > 14 drinks/week. In most of the data, results were similar for all types of alcohol. Some of the associations were not statistically significant, but closely followed patterns shown in previous research.

The frequency of drinking was found to be important, as the authors stated that "Daily low-quantity drinking was associated with a lower dementia risk (HR=0.45, 95% CI 0.23-0.89) compared with infrequent higher-quantity drinking." The authors also state: "The association of alcohol intake and ADAS-Cog scores was not modified by MCI at baseline." Obviously, however, MCI at baseline increased the risk of dementia being diagnosed during follow up, regardless of alcohol intake. Forum members concluded that this well-done study strongly supports previous research indicating that the moderate intake of alcohol in elderly subjects is associated with a lower risk of developing dementia.

Specific comments by Forum members: Reviewer Finkel agreed with the overall favorable views of this paper by Forum members, but added: "My ire was aroused because the authors, on the title page of the article, instructed us that the meaning of the paper should be the following: 'These findings suggest that physicians caring for older adults need to carefully assess the full dimensions of drinking behavior and cognition when providing guidance to patients about their alcohol consumption.' While that may be correct, the meaning of the paper is what the reader takes from it, not what the author or editor instructs him/her to derive — the meaning of this paper is clearly not what the authors say it is! The meaning is that this paper supports a J-shaped curve for the relation of alcohol to cognition among older individuals.

"Is this not another example of authors/editors being afraid to admit that data supported drinking's hormetic role, that alcohol in any form or dose might be beneficial, especially to mature individuals?" Other Forum members agreed that the key conclusion of this paper is that moderate

drinking is not only not harmful to cognitive function, but appears to be associated with a reduced risk of dementia.

Reviewer Skovenborg agreed: "I share Finkel's ire and resent the routine alcohol-benefit disclaimer you will typically find in papers published in American journals. I have been told that the disclaimers are necessary for the authors in order to protect future grants to finance their research. And that everybody, with knowledge of that being the case, routinely disregard the 'disclaimer-speak' and just read what the data support. This may not be a mature, evidence-based system but rather a system infected with political considerations; however, it seems to be a fact of today's life in research."

Forum member Goldfinger stated: "I agree that the findings in this paper are consistent with what has already been established. It speaks to the anti-atherosclerotic, anti-inflammatory, and antioxidant mechanisms of alcohol. Again, in the absence/limited significance of anti-oxidant activity of non-wine alcohol in comparison with red wine, and its bioactive non-alcohol components, we can presume that some of the negative effects particularly in the >14 drinks per week exclusive red wine consumers (at least not the most severe drinkers), may have continued benefits. This is, of course, an unproven thesis as beverage type was not evaluated very extensively.

"I also want to point out that under-reporting, certainly in place in any subjective survey of alcohol consumption, likely attenuates the negative effects in the > 14 per week crowd. I must suspect that those categorized in the < 14 drinks per week are really more robust consumers."

Forum member Mcevoy agreed that the methodology in this study is sound, adding: "The findings among the non-MCI participants are as expected, with a protective association with moderate drinking. There are so few MCI participants, particularly in the higher drinking ranges, that those results must be viewed with caution until replicated in a larger sample."

Reviewer Skovenborg commented: "I agree with the points of other Forum members, especially the very complete and careful attention to assessment of cognitive function (not seen in all studies), the looking into the importance of drinking pattern (not done in most other studies), the very thorough assessment of potential confounders (not done



in many other studies), the choice of reference group (precludes the usual comments about non-drinkers), and the clear evidence of the association between alcohol intake and cognitive decline not being modified by APOE genotype (an ongoing discussion).

"What I am missing is an explanation why a moderate intake of alcohol is protective against dementia in older persons with intact cognition at baseline and not in participants with MCI at baseline. I also agree with Goldfinger that some underreporting is likely present in the group with 7.1 – 14 drinks per week. I find some inconsistency in the assessment of alcohol consumption: WINE: 6 oz. glasses of wine = 180 ml of wine = 20 g alcohol (with the 14.0 vol % alcohol that is common these days); BEER: 12 – oz cans of beer = 360 ml beer = 14.4 g alcohol with the normal alcohol strength of 5 vol %; SPIRITS: 1 shot = 1.5 oz = 45 ml = 14.4 g alcohol with the normal 40 vol % alcohol strength. It seems to me that the wine drinkers have a risk of having their alcohol consumption over-estimated in comparison with beer and spirits drinkers. For all practical purposes you have to be aware that the limit of 14 drinks per week (for moderate consumption) may be translated to 280 g alcohol as wine and 201.6 g alcohol (as beer and wine). The limit per week could be translated to 28 units of alcohol (as wine) and 20 units of alcohol (as beer and spirits) in countries with an alcohol unit = 10 g alcohol. In the UK the limit would be 35 units per week for wine drinkers and 25 units per week for beer drinkers." Other Forum members emphasized how consumption of a beverage containing alcohol is very different when consumed with food, rather than on an empty stomach (which was not evaluated in this study).

Reviewer Mattivi wrote: "I agree with comments of others, with the additional comment that it would be necessary to consolidate the self-reported consumption with more robust biochemistry. The use of alcohol biomarkers together with the self-reported intake may improve the classification, providing a more detailed drinking history. A good example of proper application, validated in patients from psychiatric treatment units, can be found in the recent paper of the researchers at Faculty of Medicine, University of Tampere (Archer et al), who used combinations of GT, CDT, GT-CDT-combination, MCV, ALT, AST, hs-CRP, and IL-6 to

assist in judging the quantity of alcohol intake among a group of depressed patients."

Potential mechanisms for effects on dementia: Reviewer Stockley noted: "There are plausible biological mechanisms for both the positive effects on the brain's structures and functions as well as for the negative effects of heavy consumption: for example, areas of the brain related to cognitive function where alcohol is observed to act include the hippocampus, superior frontal cortex and cerebellum. In particular, depending on the amount of alcohol in the brain, certain brain cell messaging is affected (neurotransmission). Brain grey and white matter volumes also associated with cognitive function have been seen in brain imaging studies in older adults to change with alcohol consumption in a j- or u-shaped relationship. There are also common neuro- and cardio-protective relationships for alcohol, where biological mechanisms that improve blood flow to reduce the risk of atherosclerosis and coronary heart diseases also reduce the risk of cognitive impairment, which may also partly explain the similarity in relationships between cognitive impairment/dementias and alcohol and cardiovascular diseases and alcohol.

"Although there is variation in methodology between studies assessing aspects of cognitive function and alcohol consumption, both current and over a lifetime, published reviews consistently suggest that, on balance, there is a j or u-shaped relationship between alcohol consumption and the risk of cognitive impairment or dysfunction and the development of dementias such as Alzheimer's disease. For example, this j or u-shaped relationship has been observed despite beverage type, drinking patterns and follow-up periods, as well as demographics, genetics, and lifestyle factors such as smoking. Neafsey et al in 2011, for example, included 143 papers published between 1997 and 2011 in a meta-analysis. The meta-analysis showed a 23% reduction in risk of cognitive impairment and dementia for light to moderate consumers compared to non-drinkers, irrespective of whether former drinkers were included with lifetime abstainers. Furthermore, in studies that did not separate lifetime abstainers from former drinkers, the association that alcohol consumption has neuroprotective effects became stronger since former drinkers would be at an increased risk at baseline otherwise. Any alcohol



consumption, however, predicted a 34% lower risk of cognitive impairment and dementia in a study of 2805 older individuals initially free of any cognitive impairment and followed for 16 years in Australia (Simons et al), where it was concluded that while excess alcohol consumption should be avoided, it appeared safe and reasonable to recommend the continuation of moderate alcohol consumption in those already imbibing. This current study provides some fine tuning on previous findings."

#### References from Forum critique:

Archer M, Kampman O, Bloigu A, Bloigu R, Luoto K, et al. Assessment of alcohol consumption in depression follow-up using self-reports and blood measures including inflammatory biomarkers. *Alcohol and Alcoholism* 2019;54:243–250. doi: 10.1093/alcalc/agz002

Neafsey EJ, Collins MA. Moderate alcohol consumption and cognitive risk. *Neuropsychiatr Dis Treat* 2011;7:465–484.

Simons LA, Simons J, McCallum J, Friedlander Y. Lifestyle factors and risk of dementia: Dubbo Study of the Elderly. *Med J Aust* 2006;184:68-70.

#### Forum Summary

This study was designed to assess the association between alcohol consumption and dementia and the roles of mild cognitive impairment (MCI) and apolipoprotein Eε4 (APOEε4) genotype in modifying this association. It was based on data from the Ginkgo Evaluation of Memory Study, conducted from 2000 to 2008 among US community-dwelling participants (which did not demonstrate beneficial effects of ginkgo). The study analyzed 3,021 participants aged 72 years and older who were free of dementia at baseline.

The assessment of alcohol consumption included both the amount and frequency of intake, and the authors had a very broad assessment of potential confounders, including cardiovascular and other diseases, depression, race, ethnicity, educational level, social activity, medication use, and genotype for APOE-ε4. There was a very complete and careful attention to the assessment of cognitive function, as subjects underwent numerous and repeated cognitive assessments. For example, if there was any suggestion of cognitive impairment, cerebral magnetic resonance imaging and referral to an expert panel of clinicians, who reviewed and validated presence of dementia, was carried out. No previous studies have had such an extensive assessment of cognition.

The main results include a finding that for the large majority of participants (the 2,548 without mild cognitive impairment at baseline), complete abstinence from alcohol was associated with a slightly higher risk of dementia than seen in any of the groups consuming alcohol. For 473 subjects with MCI at baseline, there was no effect on risk of dementia for up to about 10 drinks/week, then a slight but insignificant increase in risk with greater intake. Daily low-quantity drinking was associated with more than 50% lower dementia risk than infrequent higher alcohol consumption. Many of the associations shown had a consistent pattern (a decrease in risk with light drinking) but did not reach statistical significance. The association was similar for all sub-groups, and was not modified by APOEε4 genotype.

The analyses seem well done, and Forum members agreed that, while some of the associations did not reach statistical significance, the data support most previous studies that show a J-shaped or U-shaped association for the relation of alcohol consumption to the risk of dementia. As has been shown in most previous studies, regular (even daily) light drinking was found to be preferable to infrequent higher levels of alcohol consumption in terms of the effect on the risk of dementia.

This critique by the International Scientific Forum on Alcohol Research was based on comments provided by the following members:

Fulvio Mattivi, MSc, CAFE – Center Agriculture Food Environment, University of Trento, via E. Mach 1, San Michele all'Adige, Italy

Pierre-Louis Teissedre, PhD, Faculty of Oenology–ISVV, University Victor Segalen Bordeaux 2, Bordeaux, France  
Giovanni de Gaetano, MD, PhD, Department of Epidemiology and Prevention, IRCCS Istituto Neurologico Mediterraneo NEUROMED, Pozzilli, Italy

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

Linda Mcevoy, PhD, Department of Radiology, University of California at San Diego (UCSD), La Jolla, CA, USA

Creina Stockley, PhD, MSc Clinical Pharmacology, MBA; Adjunct Senior Lecturer at the University of Adelaide, Australia

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

Tedd Goldfinger, DO, FACC, Desert Cardiology of Tucson Heart Center, University of Arizona School of Medicine, Tucson, AZ, USA



Imke Janssen, PhD, Department of Preventive Medicine, Rush University Medical Centre, Chicago, IL, USA.

Matilda Parente, MD, consultant in molecular pathology/genetics and emerging technologies, San Diego, CA, USA.

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

Arne Svilaas, MD, PhD, general practice and lipidology, Oslo University Hospital, Oslo, Norway

Dag S. Thelle, MD, PhD, Department of Biostatistics, Institute of Basic Medical Sciences, University of Oslo, Norway; Section for Epidemiology and Social Medicine, Sahlgrenska Academy, University of Gothenburg, Sweden

## Experimental and observational studies on alcohol use and dietary intake

The scientific literature on links among alcohol use, total energy intake, cardiometabolic disease and obesity is conflicting. A systematic review was conducted to clarify the link between alcohol use and cardiometabolic health. The review used PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to synthesize how alcohol use affects dietary intake (carbohydrate, fat and protein intake) in humans.

A search of Google Scholar, PsycINFO and PubMed from June 2016-March 2019 identified 30 relevant studies. Experimental and observational studies allowed for inferences about effects of a single drinking occasion and of frequent drinking, respectively. Alcohol quantities were standardised according to the 2015-2020 Dietary Guidelines for Americans. On average, methodological quality of the studies was medium strength.

Results indicated that a single occasion of light and moderate drinking as well as frequent light and moderate drinking were linked to greater fat and protein intake, albeit the majority of studies did not detect differences in dietary intake due to these drinking behaviours. Frequent heavy drinking, on the other hand, was linked to less carbohydrate intake in the majority of studies.

Overall, alcohol use does not appear to uniformly affect diet but instead appears to affect intake of specific macronutrients in a dose-dependent manner, most consistently decreasing carbohydrate intake with heavier use, authors conclude.

Source: [Experimental and observational studies on alcohol use and dietary intake Cummings JR, Gearhardt AN, Ray LA, Choi AK, Tomiyama AJ. \*Obes Rev.\* 2019 Nov 5. doi.org/10.1111/obr.12950.](#)

## Conceptualising alcohol consumption in relation to long-term health conditions

A study investigated how people with long term conditions, who take multiple medications, experience and understand their alcohol use. The study objective was to explore how people conceptualise the risks posed to their own health from their concurrent alcohol and use of medicines. Semi-structured interviews were conducted with a sample of 24 people in the North of England taking medication for long term conditions who drank alcohol twice a week or more often.

Alcohol was consumed recreationally and to aid with symptoms of sleeplessness, stress and pain. Interviewees were concerned about the felt effects of concurrent alcohol and medicines use and sought ways to minimise the negative effects. Interviewees associated their own drinking with short-term reward, pleasure and relief. Risky drinking was located elsewhere, in the drinking of others. People made experiential, embodied sense of health harms and did not seem aware of, or convinced by, (or in some cases appeared

resigned to) future harms to their own health from alcohol use. The study has limitations common to exploratory qualitative studies.

The authors suggest that health risk communication should be better informed about how people with long-term health conditions perceive health outcomes over time, and how they adopt experience-based safety strategies whilst medicines adherence is expected. Supporting people to make active and informed connections between medicines, alcohol and potential personal health harms requires more than a one-way style of risk communication if it is to be perceived as opening up rather than restricting choice, they add.

Source: [Conceptualising alcohol consumption in relation to long-term health conditions: Exploring risk in interviewee accounts of drinking and taking medications. Madden M, Morris S, Stewart D, Atkin K, Gough B, McCambridge J. \*PLoS One.\* 2019 Nov 7;14\(11\):e0224706. doi.org/10.1371/journal.pone.0224706. eCollection 2019.](#)



## Effects of red wine consumption on gut microbiota that affect health and disease

Le Roy CI, Wells PM, Si J, Raes J, Bell JT, Spector TD. Red wine consumption associated with increased gut microbiota  $\alpha$ -diversity in 3 independent cohorts. *Gastroenterology* 2019. In press, doi.org/10.1053/j.gastro.2019.08.024

### Authors' comments from paper

"Moderate red wine intake has been shown to exert beneficial effects on metabolic health, mostly attributed to red wine's rich and varied polyphenol content. We aimed to investigate and compare the effect of various alcoholic drinks on the gut microbiota (GM) and subsequent health outcomes in large population-based cohorts.

"We used a discovery cohort of 916 UK female individuals (TwinsUK) using a linear mixed effect model adjusted for age, BMI, Healthy Eating Index, education, and family structure. Alcohol consumption was derived from food frequency questionnaires. Alcohol patterns associated with  $\alpha$ -diversity were evaluated on GM beta-diversity using permutational multi-variate analysis of variance on Bray-Curtis dissimilarity matrix, and their association with 85 genera present in at least 10% of the population, when  $\alpha$ -diversity was considered as a mediator of the association between alcohol consumption and BMI or blood fasting glucose, insulin, total cholesterol, chylomicron, LDL, and HDL levels. Replications were sought using the Flemish Gut Flora Project (FGFP, n=1,104) and the American Gut Project (n=904), as well as in discordant twin analysis in the discovery cohort."

In Results, the authors report: "Red wine consumption was positively associated in a frequency-dependent manner with  $\alpha$ -diversity, but even rare consumption showed an effect. White wine also displayed a lesser but suggestive positive association with  $\alpha$ -diversity, while we saw no association with other alcohol categories."

The authors summarize their findings: "Red wine consumption was associated with an increase in gut microbial  $\alpha$ -diversity, potentially mediating host BMI reduction in 2 cohorts. This was not observed in response to any of the other alcohols studied. These results could be due to the high polyphenol content of red wine, contributing to the global debate about its potential health

benefits and further our understanding of gut microbiota mechanisms."

### Forum Comments

This brief paper supports earlier research relating wine consumption to gut microbiota, and the relation of the latter to obesity and to cardiovascular and other diseases. Reviewer Finkel states that "These results are in line with the burgeoning studies of the influences of what are living in our guts — just a beginning. There are other papers in the pipeline on similar matters – for example, the recently released pre-publication paper by Naumovski et al states: "It is without doubt that modifications of gut microbiota are at the intersection between dietary intake and beneficial health outcomes, and understanding the benefits of red wine polyphenols on gut microbiota remains presented with challenges and controversies. Some of these include the diversity of consumed wines and variation in their polyphenolic content that is influenced by a variety of factors (Kumar Singh et al)." These authors state further: "Results from a Danish study of overall wine intake in 720 adolescents with a 20- or 22-year follow-up reported an association with less weight gain until midlife, but not for beer and spirits (Poudel et al)."

Naumovski et al also note: "Wine consumption was also associated with better overall nutrition and lifestyle, while moderate wine drinkers exhibited better overall health and quality of life. Moderate intake of red wine is recommended as part of the Mediterranean dietary pattern and is associated with successful aging (Foscolou et al), a J-shaped relationship with all-cause mortality (Gronbaek et al), and is often associated with the "French Paradox" referring to lower CVD rates despite high saturated fat consumption in the population (Renaud, De Lorgeril).

"However, it is not possible to derive cause and effect due to confounding variables in epidemiological studies such as socio-environmental factors, healthy user bias, and limitations of self-reported dietary collection methods. Some of these include the diversity of consumed wines and variation in their polyphenolic content that is influenced by variety of factors: even with doses that are



exceeding physiologically relevant concentrations, evidence of cardiometabolic effects is inconclusive (Nash et al, Christenson et al). Therefore, whether moderate to high dosages will exhibit beneficial health effects without negative implications on gut barrier integrity and gut microbiota is still unknown. This might be further elucidated with technological and research advances in the '-omics' areas where red wine polyphenols by-products might be investigated from the population perspective (Kumar Singh et al)."

Reviewer de Gaetano wrote: "I agree that this is an interesting study combining epidemiology and mechanisms. I would have appreciated a better definition of spirits. Some (many...) years ago we compared red wine and gin consumption (Estruch et al). The latter beverage did not virtually contain any measurable polyphenols. But other spirits do. A direct comparison between groups consuming either an alcoholic beverage containing no polyphenol or red wine would have better supported the role of polyphenols, as suggested by the authors."

Forum member Waterhouse commented: "This is a very interesting study. The authors control for all sorts of issues, but seem to have forgotten to control for other dietary sources of polyphenols, if that is their hypothesis. In addition, the major phenolics in red wine are the proanthocyanidins, not resveratrol or gallic acid, the ones discussed in this paper. The proanthocyanidins are also the major constituents of chocolate, with lesser amounts in apples and a few other foods, with related compounds in tea. So, it would have been very interesting to try and control for intake of these compounds."

"In addition, there are a number of studies showing a relationship between alcohol consumption and BMI that they seem to have overlooked. These include Arif & Rohrer, Dumesnil et al, and Barry et al. So, the relationship between regular alcohol consumption and reduced BMI has already been well documented." Reviewer Teissedre noted: "I fully agree with the comments of Waterhouse, and add that we should not forget that red wine also contains sulfur dioxide that should influence the microbiota in the gut."

Forum member van Velden wrote: "In the 21st century we are confronted with an increase in the incidence of chronic and degenerative

diseases due to ageing. This is due to the effective management of acute diseases with effective antibiotics, etc. However, the inappropriate use of broad spectrum antibiotics resulted in the destruction of the gut microbiome. The non-pathological bacteria in the gut have an important function in the immune function by breaking down fibres and other food ingredients and releasing micronutrients that stimulate the body's immunity. Probiotics are standard practice to help restore the gut microbiome.

"Higher socio-economic groups with a responsible lifestyle use lifestyle-related interventions such as weight control, no smoking, exercise and a Mediterranean diet rich in fruit and vegetables. This includes moderate red wine consumption and low consumption of refined carbohydrates. The anti-oxidant components in red wine have an important role to play in this regard to reduce oxidative stress. The sugar in the grape juice has been fermented to ethanol. Nutri-genetics is also an emerging contributing factor in disease expression that has to be taken into consideration. However, we must be careful to consider mono-interventions in disease causation and prevention, and health promotion."

Reviewer Djoussé added comments: "This paper helps explain potential biologic effects of red wine on health. Modulation of gut flora is one step closer to understanding the biologic pathways of red wine. Unfortunately, the authors were not able to relate alpha diversity with bioactive compounds such as TMAO (produced by gut bacteria) that is known to affect CVD risk. Nonetheless, a crossover trial of the effects of red wine intervention and TMAO (a choline metabolite derived by gut bacteria known to adversely affect CVD risk and prognosis in CHF) is listed on Clinical trial.gov, but no findings yet (unless I missed them). Furthermore, resveratrol has been reported to reduce TMA production (Chen et al). Definitely an interesting study."

Reviewer Puddey noted: "I am in agreement with the commentary (and caveats) that accompany the forum critique of this article. I would also note that authors of this paper have previously documented other aspects of the gut microbiome as a potential determinant of human health using TwinsUK data that warrant further consideration. Firstly, Bowyer et al reported on how socio-



economic status may influence gut microbiota, a very relevant confounder if examining associations with alcohol intake, where patterns of drinking and choice of alcoholic beverage may have large socio-economic determinants. Secondly, Visconti et al have highlighted the importance of not focusing on the taxonomy of the fecal microbiome alone but also its interaction with both the fecal and the systemic metabolic host environment. This will be another major consideration given the wide genetic and gender diversity in alcohol and polyphenol metabolism. This is clearly an interesting area with potential emerging implications for the effects of alcohol and red wine in health and disease."

### References noted in Forum critique:

Arif AA, Rohrer JE. Patterns of alcohol drinking and its association with obesity: data from the third national health and nutrition examination survey, 1988–1994. *BMC Public Health* 2005;5:126. doi:10.1186/1471-2458-5-126

Barry AE, Anna K Piazza-Gardner AK, Holton MK. Assessing the alcohol–BMI relationship in a US national sample of college students. *Health Education J* 2014;74:496-504. <https://doi.org/10.1177/0017896914547289>

Bowyer RCE, Jackson MA, Le Roy CI, et al. Socioeconomic status and the gut microbiome: A TwinsUK Cohort Study. *Microorganisms* 2019;7

Chen M-L, Yi L, Zhang Y, Zhou X, Ran L, Yang J, Zhu J-D, Zhang QY, Mi M-T, Rey F. Resveratrol Attenuates Trimethylamine-N-Oxide (TMAO)-Induced Atherosclerosis by Regulating TMAO Synthesis and Bile Acid Metabolism via Remodeling of the Gut Microbiota. *mBio* 2018;7:e02210-15. doi:10.1128/mBio.02210-15

Christenson J, Whitby SJ, Mellor D, et al. The Effects of Resveratrol Supplementation in Overweight and Obese Humans: A Systematic Review of Randomized Trials. *Metab Syndr Relat Disord* 2016;14:323-333

Dumesnil C1, Dauchet L, Ruidavets JB, Bingham A, Arveiler D, Ferrières J, et al. Alcohol consumption patterns and body weight. *Ann Nutr Metab* 2013;62:91-97. doi: 10.1159/000342839

Estruch R1, Sacanella E, Badia E, Antúnez E, Nicolás JM, Fernández-Solá J, Rotilio D, de Gaetano G, Rubin E, Urbano-Márquez A. Different effects of red wine and gin consumption on inflammatory biomarkers of atherosclerosis: a prospective randomized crossover trial. Effects of wine on inflammatory markers. *Atherosclerosis* 2004;175:117-123

Foscolou A, Koloverou E, Matalas A-L, et al. Decomposition of Mediterranean Dietary Pattern on

Successful Aging, Among Older Adults: A Combined Analysis of Two Epidemiological Studies. *J Aging Health* 2018;31:1549-1567

Gronbaek M, Becker U, Johansen D, et al. Type of alcohol consumed and mortality from all causes, coronary heart disease, and cancer. *Ann Intern Med* 2000;133:411-419

Kumar Singh A, Cabral C, Kumar R, et al. Beneficial Effects of Dietary Polyphenols on Gut Microbiota and Strategies to Improve Delivery Efficiency. *Nutrients* 2019;11

Liangpunsakul S, Haber P, McCaughan GW. Alcoholic Liver Disease in Asia, Europe, and North America. *Gastroenterology* 2016;150:1786-1797

Nash V, Ranadheera CS, Georgousopoulou EN, et al. The effects of grape and red wine polyphenols on gut microbiota – A systematic review. *Food Res Int* 2018;113:277-287

Naumovski N, Panagiotakos DB, D’Cunha NM. Untangling the two-way relationship between red wine polyphenols and gut microbiota. *Gastroenterology* 2019;pre-publication. doi: <https://doi.org/10.1053/j.gastro.2019.10.015>

Poudel P, Ismailova K, Andersen LB, et al. Adolescent wine consumption is inversely associated with long-term weight gain: results from follow-up of 20 or 22 years. *Nutr J* 2019;18:56

Renaud S, de Lorgeril M. Wine, alcohol, platelets, and the French paradox for coronary heart disease. *Lancet* 1992;339:1523-1526

Visconti A, Le Roy CI, Rosa F, et al. Interplay between the human gut microbiome and host metabolism. *Nat Commun* 2019;10:4505

### Forum Summary

This brief paper supports earlier research relating wine consumption to gut microbiota, and the relation of the latter to obesity and to cardiovascular and other diseases. The authors report that “Red wine consumption was positively associated in a frequency-dependent manner with  $\alpha$ -diversity, but even rare consumption showed an effect. White wine also displayed a lesser but suggestive positive association with  $\alpha$ -diversity, while we saw no association with other alcohol categories.” They suggested that these effects of red wine on gut microbiota may play a role in the reduced risk of obesity, cardiovascular disease, and reduced total mortality associated with red wine intake that have been demonstrated in many cohort studies.

An increasing number of studies point to beneficial effects of wine, especially red wine, which may not be present for other types of beverages containing



alcohol. However, we agree with the conclusions of the authors: "Red wine consumption should always be studied in the context of the overall dietary habits of individuals to take into account residual confounding and bias. The majority of observational studies fail to do this adequately; and thus, results from large scale clinical trials are needed in order to establish a cause and effect relationship between red wine polyphenols and gut microbiota."

Forum members consider that the present analyses support a beneficial health effect of regular and moderate red wine, but also agree that much further research will be required to work out the complex relation between the consumption of red wine and gut microbiota and the effects on health.

This critique by the International Scientific Forum on Alcohol Research has been prepared with contributions from the following members:

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

Ian Puddey, MD, Emeritus Professor, Faculty of Health & Medical Sciences, University of Western Australia, Nedlands, Australia

Luc Djoussé, MD, DSc, Dept. of Medicine, Division of Aging, Brigham & Women's Hospital and Harvard Medical School, Boston, MA, USA

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

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

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

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

Professor Andrzej Pająk, Epidemiology and Population Studies, Jagiellonian University Medical College, Kraków, Poland

Creina Stockley, PhD, MSc Clinical Pharmacology, MBA; Adjunct Senior Lecturer at the University of Adelaide, Australia

Ian Puddey, MD, Emeritus Professor, Faculty of Health & Medical Sciences, University of Western Australia, Nedlands, Australia

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

Ramon Estruch, MD, PhD, Hospital Clinic, IDIBAPS, Associate Professor of Medicine, University of Barcelona, Spain

## Lifetime drinking trajectories and nonfatal acute myocardial infarction

The relation of lifetime drinking trajectories to coronary heart disease is not well understood. A research project identified cases hospitalised for a nonfatal acute myocardial infarction (AMI) and healthy population-based controls matched on age and sex. Individuals completed a physical examination and an interview covering known AMI risk factors and a detailed lifetime drinking history. Distinct lifetime drinking trajectories based on ounces of ethanol consumed per decade between ages 10 and 59 years were derived and characterised according to lifetime drinking patterns associated with each. Analyses were conducted to estimate AMI risk among participants who never drank regularly compared to lifetime drinking trajectories and risk associated with distinct trajectories among former and current drinkers.

Two lifetime drinking trajectories were derived, early peak and stable. Early peak trajectories were characterised by earlier onset of regular drinking, less frequent drinking, more drinks per drinking

day, fewer total drinks, more frequent drunkenness per drinking year, and reduced alcohol intake or abstinence by middle age.

Never drinking regularly, reported by significantly more women than men, was associated with significantly higher AMI risk than stable lifetime drinking trajectories among men and in the sex-combined analysis of former drinkers only. Compared to stable lifetime drinking trajectories, early peak trajectories were associated with significantly higher AMI risk among male former drinkers, among sex-combined former drinkers, and among female current drinkers.

The authors comment that epidemiological studies of alcohol and health in populations over age 35 may have underestimated the impact of heavy episodic drinking during adolescence and emerging adulthood on the cardiovascular system.

Source: Lifetime Drinking Trajectories and Nonfatal Acute Myocardial Infarction. Russell M, Fan AZ, Freudenheim JL, Dorn J, Trevisan M. *Alcohol Clin Exp Res.* 2019 Nov;43(11):2384-2394. doi.org/10.1111/acer.14190.



## Mediterranean dietary pattern and skin cancer risk: A prospective cohort study in French women

The Mediterranean diet (MD) has been reported to be associated with lower cancer risk. However, while previous studies explored major single components of the MD, only 1 previous study has investigated adherence to the MD in relation to melanoma risk.

A study explored the relations between adherence to the MD and the risk of skin cancer, including melanomas, basal cell carcinomas (BCCs), and squamous cell carcinomas (SCCs).

Etude Epidémiologique auprès de femmes de la Mutuelle Générale de l'Education Nationale (E3N) is a prospective cohort of 98,995 French women aged 40-65 y in 1990. Dietary data were collected via a validated food questionnaire in 1993. Adherence to the MD was assessed using a 9-unit dietary score that incorporates intakes of fruit, vegetables, legumes, cereal products, olive oil, fish, dairy products, meat products, and alcohol. We used Cox proportional hazards regression models to compute HRs and 95% CIs adjusted for age and main known skin cancer risk factors.

From 1993 to 2008, a total of 2003 skin cancer cases were ascertained among 67,332 women, including 404 melanomas, 1367 BCCs, and 232 SCCs. Score of adherence to the MD was associated with lower risk of skin cancer (HR: 0.83; 95% CI: 0.73, 0.93 for high compared with low score.). MD score was also inversely and linearly associated with risks of melanoma (HR: 0.72; 95% CI: 0.54, 0.96; Ptrend = 0.02) and BCC (HR: 0.77; 95% CI: 0.66, 0.90) but not SCC (HR: 1.08; 95% CI: 0.75, 1.55;), although with no heterogeneity across skin cancer types.

These findings suggest that adherence to the Mediterranean Diet is associated with a lower skin cancer risk in women, particularly melanoma and BCC. If confirmed in future research, these findings may have important implications in skin cancer prevention.

Source: Mediterranean dietary pattern and skin cancer risk: A prospective cohort study in French women. Mahamat-Saleh Y, Cervenka I, Al Rahmoun M, Savoye I, Mancini FR, Trichopoulou A, Boutron-Ruault MC, Kvaskoff M. *Am J Clin Nutr.* 2019 Oct 1;110(4):993-1002. doi.org/10.1093/ajcn/nqz173.

## Links between teenage anxiety and later harmful drinking

Researchers at the University of Bristol have found evidence of an association between generalised anxiety disorder at age 18 and harmful drinking three years later, thanks to the long-term health study, Children of the 90s.

The study, published in *Drug and Alcohol Dependence*, strengthens the evidence for a relationship between anxiety and later alcohol use as the researchers accounted for other factors such as adolescent smoking and cannabis use, and parental anxiety and alcohol use.

Researchers used a longitudinal design to help examine the order of associations between generalised anxiety disorder and alcohol use. They also tested whether drinking to cope, a motive for drinking alcohol, influenced these associations.

Using questionnaire and clinical interview data from more than 2000 participants, they found generalised anxiety disorder at age 18 was linked to frequent drinking, frequent bingeing, hazardous drinking, and harmful drinking at age 18. Generalised anxiety disorder continued to be associated with harmful drinking at age 21.

Drinking to cope was also strongly associated with more harmful drinking, but it did not appear to influence associations between anxiety and alcohol use. On average, adolescents with anxiety drank at more harmful levels regardless of whether they tended to drink alcohol for coping reasons or not.

Maddy Dyer, PhD student at the University of Bristol, commented: "Our most important finding was that the relationship between generalised anxiety disorder and harmful drinking at age 18 persists into early adulthood. Helping adolescents to develop positive strategies for coping with anxiety, instead of drinking alcohol, may reduce the risk of future harmful drinking. However, we cannot determine if the relationship is causal, because we used an observational study design."

Source: Alcohol use in late adolescence and early adulthood: The role of generalised anxiety disorder and drinking to cope motives. Maddy Dyer, Jon Heron, Matthew Hickman, and Marcus Munafò. *Drug and Alcohol Dependence*, available online 6 November 2019, 107480 open access. doi.org/10.1016/j.drugalcdep.2019.04.044



## Phage therapy shows promise for treating alcoholic liver disease

A team of researchers led by King's College London and the University of California San Diego School of Medicine have for the first time successfully applied bacteriophage (phage) therapy in mice to alcohol-related liver disease. Phages are viruses that specifically destroy bacteria.

In a paper published 13th November in *Nature*, the team discovered that patients with severe alcoholic hepatitis had high numbers of a destructive gut bacterium and that they were able to use a precise cocktail of phages to target and kill the bacteria, eradicating the disease.

They found that with this disease, liver cells are injured by a toxin called cytolysin, secreted by *Enterococcus faecalis*, a type of bacteria typically found in low numbers in the healthy human gut. They found that people with alcoholic hepatitis have more cytolysin-producing *E. faecalis* in their guts than healthy people. The more *E. faecalis* present, the more severe their liver disease.

Using samples collected from patients, the researchers found that nearly 90 percent of cytolysin-positive patients with alcoholic hepatitis died within 180 days of hospital admission, compared to approximately 4 percent of cytolysin-negative patients.

To investigate the potential for phage therapy, the researchers isolated four different phages that specifically target cytolysin-producing *E. faecalis*. When they treated the mice with these, the bacteria were eradicated, and alcohol-induced liver disease was abolished. Control phages that target other bacteria or non-cytolytic *E. faecalis* had no effect.

**Source: Bacteriophage targeting of gut bacterium attenuates alcoholic liver disease.** Duan, Y., Llorente, C., Lang, S. et al. *Nature* (2019).

[doi.org/10.1038/s41586-019-1742-x](https://doi.org/10.1038/s41586-019-1742-x)

[kcl.ac.uk/news/phage-therapy-shows-promise-for-treating-alcoholic-liver-disease](https://www.kcl.ac.uk/news/phage-therapy-shows-promise-for-treating-alcoholic-liver-disease)

## Untangling the two-way relationship between red wine polyphenols and gut microbiota

A study published in the *Journal Gastroenterology* looks at the current evidence on the relationship between red wine polyphenols and gut microbiota.

The authors state that 'It is without doubt that modifications of gut microbiota are at the intersection between dietary intake and beneficial health outcomes, and understanding the benefits of red wine polyphenols on gut microbiota remains presented with challenges and controversies. Some of these include the diversity of consumed wines and variation in their polyphenolic content that is influenced by variety of factors. Even with doses that are exceeding physiologically relevant concentrations, evidence of cardiometabolic effects is inconclusive. Therefore, whether moderate to high dosages will exhibit beneficial health effects without negative implications on gut barrier integrity and gut microbiota is still unknown. This might be further elucidated with technological and research advances in the '-omics' areas where red wine polyphenols by-products might be investigated from the population perspective'.

The authors conclude that 'The influence of red wine polyphenols on gut microbiota is becoming widely recognised; however, further research of low to moderate consumption of red wine polyphenols over more extended periods is necessary to elucidate the impact of various factors, including overall diet composition. Red wine consumption should always be studied in the context of the overall dietary habits of individuals to take into account residual confounding and bias. The majority of observational studies fail to do this adequately; and thus, results from large-scale clinical trials are needed in order to establish a cause and effect relationship between red wine polyphenols and gut microbiota. As high consumption of alcohol is still associated with multiple adverse health effects, it remains to be seen whether long-term trials of red wine can be safely managed in an ethically responsible manner'.

**Source: Untangling the two-way relationship between red wine polyphenols and gut microbiota.** Naumovski N, Panagiotakos DB, D'Cunha NM, *Gastroenterology* (2019). [doi.org/10.1053/j.gastro.2019.10.015](https://doi.org/10.1053/j.gastro.2019.10.015).

[gastrojournal.org/article/S0016-5085\(19\)41457-1/pdf](https://www.gastrojournal.org/article/S0016-5085(19)41457-1/pdf)



## BBC article Can Wine ever be good for you?

An article by Jessica Brown, writing for BBC future questions whether red wine's reputation as being good for our health is valid. Weighing up the evidence of whether a J shaped curve really exists for the consumption of alcohol and health, Brown

concludes that the healthiest option is to abstain – and that red wine is the healthiest option for those who do drink.

[bbc.com/future/article/20191021-is-wine-good-for-you](https://www.bbc.com/future/article/20191021-is-wine-good-for-you)

## Years of education may impact drinking behaviour and risk of alcohol dependence

The results of a study published in *Molecular Psychiatry* indicate that higher educational attainment - spending more years in education - may impact people's drinking behaviour and reduce their risk of alcohol dependence.

Previous observational studies have suggested that lower educational attainment (EA) may be associated with risky alcohol use behaviours; however, the authors of this study say that these findings may be biased by confounding and reverse causality.

For their study, the researchers at the US National Institutes of Health performed two-sample Mendelian randomisation (MR) using summary statistics from recent genome-wide association studies based on >780,000 participants to assess the causal effects of EA on alcohol use behaviours and alcohol dependence (AD).

Fifty-three independent genome-wide significant single-nucleotide polymorphisms (SNPs) previously associated with EA were tested for association with alcohol use behaviours. While genetic instruments associated with increased EA are not associated with total amount of weekly drinks, the research showed that they are associated with reduced frequency of binge drinking  $\geq 6$  drinks, reduced total drinks consumed per drinking day, as well as lower weekly distilled spirits intake. Conversely, genetic instruments for increased EA were associated with increased alcohol intake frequency, and increased weekly white wine and red wine intake. Genetic instruments associated with increased EA reduced AD risk: an additional 3.61 years schooling reduced the risk by ~50%. Consistency of results across complementary MR methods accommodating different assumptions about genetic pleiotropy strengthened causal inference.

The study findings suggest that educational attainment may have important effects on alcohol consumption patterns and may provide potential mechanisms to explain the reported associations between EA and adverse health outcomes.

Dr Falk Lohoff, the corresponding author said: "Using data from a total of approximately 780,000 study participants, we found that genetic variants associated with an additional 3.61 years of schooling were associated with an approximately 50% reduced risk of alcohol dependence. The presence of genetic variants associated with educational attainment also affected the pattern of alcohol use and type of alcoholic beverage people consumed."

"It is important to understand that while these genetic variants allow us to investigate the possible effect of educational attainment on alcohol consumption and alcohol dependence, this doesn't mean that educational attainment can't be modified. The possible effect of educational attainment on drinking that we show in this study, suggests that increasing educational attainment may be a useful target for prevention programmes against problematic alcohol use, alcohol dependence, and their consequences."

The authors caution that as the genetic data examined in this study was obtained from people from Anglophone countries, the applicability of the findings to other countries may be limited. Replication of the findings using data from different countries and ethnicities is necessary.

Source: Rosoff et al. Educational attainment impacts drinking behaviors and risk for alcohol dependence: results from a two-sample Mendelian randomization study with ~780,000 participants. *Molecular Psychiatry*, 2019 doi.org/10.1038/s41380-019-0535-9.



## Marriage and reductions in men's alcohol, tobacco, and cannabis use

Authors of a recent study say that psychoactive substance use is lower among married compared to divorced or unmarried men; yet, the nature of this effect remains unclear because becoming and staying married is potentially confounded with substance-related background familial and individual factors, like parental divorce and personality.

Their research investigated the associations between marital status and substance use; how substance use changed across the transition to marriage; and whether marriage effects were likely to be causal.

The sample included 1790 adults from male-male twin pairs from a population-based registry. Measures of marital status and alcohol, tobacco, and cannabis use came from Life History Calendars. Data were analysed using regression, co-twin comparison, and within-person models.

Married men used less alcohol, tobacco, and cannabis than men who were divorced/separated

or single. In analyses of substance use across the transition to marriage, men reduced their alcohol and cannabis use both before and after marriage, but their tobacco use only after marriage. These effects were largely robust in co-twin and within-person analyses.

The authors conclude that marriage was associated with substantial reductions in substance use compared to being divorced/separated or single, and these reductions began prior to marriage. The co-twin comparison and within-person models ruled out the alternative explanation that marriage effects were due to confounding background familial and individual factors. These results provide strong evidence that the social role expectations associated with marriage reduce psychoactive substance use.

Source: *Marriage and reductions in men's alcohol, tobacco, and cannabis use*. Salvatore JE, Gardner CO, Kendler KS. *Psychol Med*. 2019 Nov 5:1-7. doi.org/10.1017/S0033291719002964

## A systematic review of parent based programmes to prevent or reduce alcohol consumption in adolescents

Adolescent alcohol consumption is an issue of ongoing concern and programmes targeting parents have been identified as an important component in minimising and preventing alcohol related harm in adolescents. A study evaluated existing parent based alcohol education programmes with a focus on understanding parent specific outcomes including parental attitudes, parent-child communication, alcohol specific rule setting and parental monitoring; study quality, the extent of stakeholder engagement in programme design and the level of theory application.

A systematic review of the literature was conducted up to August 2019. A total of 4288 unique records were retrieved from the eight databases. Studies were included if they evaluated school based alcohol education programmes that included a parent component and detailed outcome measures associated with parent data. The methodological quality of the included studies was assessed using the Effective Public Health Practice Project (EPHPP) quality assessment tool.

In total 17 studies qualified for assessment, detailing 13 individual parent programmes. Of these, ten programmes demonstrated positive effects in at least one parent reported outcome measure. Stakeholder engagement during the design of programmes was lacking with the majority of programmes. One third of the programmes did not report theory use and when theory was used reporting was weak with three programmes applying theory, five testing theory and none building theory. According to the EPHPP tool, overall ten programs were rated as weak, three as moderate and none as strong.

Future studies are recommended to further enhance the effectiveness of parental programmes by improving study quality, increasing stakeholder engagement and increasing the level of theory application and reporting, the study concluded.

Source: *A systematic review of parent based programs to prevent or reduce alcohol consumption in adolescents*. Erin Hurley, Timo Dietrich, Sharyn Rundle-Thiele, *BMC Public Health* volume 19, Article number: 1451 (2019). doi.org/10.1186/s12889-019-7733-x



## The long-term effectiveness of a social norming campaign to reduce high-risk drinking at Michigan State University

A study conducted at Michigan State University (MSU) evaluated the effectiveness of a university-wide social norms marketing campaign to reduce high-risk drinking and its consequences among students.

Campaign messages regarding descriptive and injunctive norms were distributed campus-wide from 2001 to 2014 to correct norm misperceptions. Random samples of students were surveyed most semesters to monitor message saturation, dosage, and believability along with drinking attitudes, behaviours and harm related to celebratory events. NCHA conducted biennially since 2000 to assess overall progress.

Perceived drinking norms declined along with measures of actual drinking intensity, frequency,

and frequency of intense drinking. Use of protective behaviours most often addressed in campaign messages increased while driving after drinking declined. In addition, reported adverse effects of drinking on academic performance declined substantially.

The evidence suggests the social norms approach has been effective at reducing adverse academic outcomes of drinking. Changes in perceptions, attitudes, behaviours and outcomes appear to be continuing.

**Source:** The long-term effectiveness of a social norming campaign to reduce high-risk drinking: The Michigan State University experience, 2000-2014. Hembroff LA, Martell D, Allen R, Poole A, Clark K, Smith SW. *J Am Coll Health*. 2019 Oct 29;1-11. doi.org/10.1080/07448481.2019.1674856

## Are trends in alcohol consumption and cause-specific mortality in Russia between 1990 and 2017 the result of alcohol policy measures?

A study analysed trends in alcohol consumption and mortality and their association with alcohol control measures in Russia between 1990 and 2017.

Analysis of trends for all-cause mortality and alcohol-related mortality, life expectancy, and total adult per capita alcohol consumption and their relationship were conducted. A narrative literature review of alcohol control policies since 1990 was also performed.

Corresponding trends of alcohol consumption and all-cause mortality and cause-specific mortality were observed for the analysed period. Steep increases in consumption and mortality occurred in 1991–1994 and in 1998–2002, and a continuous decline was observed since 2003. Trends in alcohol consumption were also closely mirrored by trends

in life expectancy. These dynamics seem to be affected by economic trends, better regulation of alcohol and a change in drinking pattern/drinks of choice.

The study concludes that a combination of several factors seems to be at play to explain alcohol consumption and mortality trends: the general economic situation, the availability and affordability of alcohol, and the changing patterns of alcohol consumption.

**Source:** Are Trends in Alcohol Consumption and Cause-Specific Mortality in Russia Between 1990 and 2017 the Result of Alcohol Policy Measures? Alexander Nemtsov Maria Neufeld, & Jürgen Rehm. *Journal of Studies on Alcohol and Drugs*, 80(5), 489–498 (2019). Published Online: October 02, 2019. doi.org/10.15288/jsad.2019.80.489

## Rise in number of children admitted to hospital over their drinking in Ireland

There was an 80% increase in the number of children admitted to hospital because of alcohol-intoxication in Ireland in the last year and there have been 78 cases over the past three years, according to details released under the Freedom of Information Act.

36 children under 16 had a diagnosis of alcohol-intoxication when they were discharged after

inpatient or day-case stays in Irish hospitals last year - 18 boys and 18 girls.

This was a big increase on a total of 20 in 2017, and 22 admissions in 2016.

These statistics do not include emergency department and outpatient cases, and only include longer - or more serious - admissions.



## Alcohol consumption among spanish female adolescents

Researchers from Madrid conducted a nationwide, epidemiological, cross-sectional study on alcohol consumption by adolescent women in Spain. Their analysis estimated trends in the prevalence of alcohol consumption among female adolescents (14-18 years old) between 2006 and 2014 and aimed to identify the factors associated with the probability of consuming alcohol during adolescence.

Individualised secondary data was retrieved from the 2006 and 2014 Spanish state survey on drug use in secondary education, for a total of 48,676 survey respondents aged 14 to 18 years. Sociodemographic and educational features, lifestyle habits, perceived health risk for consumption, and perceived availability of substance were also analysed.

The prevalence of alcohol consumption among female adolescents was 62.35% during the study period. Alcohol consumption increased with age and was more frequent on weekends than on school days. The variables associated with a greater probability of alcohol consumption were tobacco, marijuana (aOR = 2.37; 95% CI), and alcohol consumption by friends (aOR = 7.24).

The authors conclude that alcohol consumption by female adolescents in Spain significantly increased from 2006 to 2014. Marijuana and alcohol consumption by friends were associated factors.

**Source: Alcohol Consumption Among Spanish Female Adolescents: Related Factors and National Trends 2006-2014.** Alonso-Fernández N et al. *Int J Environ Res Public Health*. 2019 Nov 5;16(21). pii: E4294. doi.org/10.3390/ijerph16214294.

## Alcohol and illicit drugs in drivers involved in road traffic crashes in Italy

An investigation assessed the prevalence of alcohol and drugs of abuse in Italian drivers involved in road traffic crashes between 2011 and 2018.

Toxicological analyses were performed on the whole blood of 7,593 injured drivers. Alcohol and illicit drugs, namely tetrahydrocannabinol (THC; cut-off 2ng/ml), cocaine (cut-off 10ng/ml), illicit opiates (cut-off 10ng/ml) and amphetamines (amphetamine, methamphetamine, MDMA, MDA; cut-off 20ng/ml) were investigated. The age and gender of the driver, the time of the crash (weekend/weekday and day/night), the road crash year and Blood Alcohol Concentration (BAC) were also considered.

16.2% of samples tested positive for alcohol, 2.5% for cocaine, followed by opiates (2.0%), cannabinoids (1.5%), and amphetamines (0.5%). The overall prevalence of alcohol and drugs

was lower than those reported in previous epidemiological studies of the DRUID project. The year 2011 showed the highest prevalence of drug-positive cases (24.1%), while the lowest prevalence was found in 2016 (16.8%), after the update of the Road Traffic Law (RTL) that increased punishments for driving under the influence. A progressive increase in the number of alcohol-positive female drivers was observed from 2011 to 2018, and the highest prevalence was found in the 26-35-year-old age range. A higher percentage of drug-positive drivers was found on weekend nights for alcohol and on both weekend and weekday nights for drugs. The types of drugs used by drivers did not change during the studied period.

**Source: Alcohol and illicit drugs in drivers involved in road traffic crashes in Italy. An 8-year retrospective study.** Barone R, et al. *Forensic Sci Int*. 2019 Oct 23;305:110004. doi.org/10.1016/j.forsciint.2019.110004.

## What people say about alcohol online differs from what they say in real life

A report from Engagement Labs finds that what consumers say about liquor, wine and beer brands "offline" in face-to-face conversation may be very different from what they say on social media websites.

Engagement Lab report concludes that "there is reason to believe that for the beverage alcohol industry, social media may be a particularly poor predictor of offline behaviour". One possible reason for this could be that some marketers may

hold back on social media because of complicated rules within their industries, but another reason is that "many social media users will be wary of sharing too many posts about alcohol, for fear of implying they have a drinking problem, or simply to avoid the risk of offending friends and family who are confirmed non-drinkers."

[mediapost.com/publications/article/342440/what-people-say-about-booze-online-differs-from-wh.html](https://mediapost.com/publications/article/342440/what-people-say-about-booze-online-differs-from-wh.html)



## Why is adolescent drinking declining? A systematic review and narrative synthesis

Adolescent drinking has declined across many developed countries from the turn of this century. A review explores evidence examining possible reasons for this decline.

Systematic searches were conducted across five databases: Medline, PsycINFO, CINAHL, Informit Health and Scopus to identify studies looking at the association between declining alcohol consumption and potential explanatory factors measured over time. .

17 studies met the inclusion criteria. Five studies found moderate evidence for changes in parental practices as a potential cause for the decline. Five studies that examined whether alcohol policy changes influenced the decline found weak evidence of association. Three studies explored whether alcohol use has been substituted by illicit substances but no evidence was found. Two studies examined the effect of a weaker economy; both

identified increase in adolescent alcohol use during times of economic crisis. One study indicated that changes in exposure to alcohol advertising were positively associated with the decline and another examined the role of immigration of non-drinking populations but found no evidence of association. One study tested participation in organised sports and party lifestyle as a potential cause but did not use robust analytical methods and therefore did not provide strong evidence of association for the decline.

The most robust and consistent evidence was identified for shifts in parental practices. Further research is required using robust analytical, the authors suggest.

**Source:** Why is adolescent drinking declining? A systematic review and narrative synthesis. Vashishtha R; Livingston M; Pennay A; Dietze P; MacLean S; Holmes J; Herring R; Caluzzi G; Lubman D. *Journal: Addiction Research and Theory.* doi.org/10.1080/16066359.2019.1663831

## Socioeconomic status and alcohol use disorders across the lifespan

According to the authors of a paper published by PLOS in October, it is accepted knowledge that alcohol use disorder (AUD) aggregates in families and is associated with socioeconomic status (SES). Their study assessed the effect of education, income and neighbourhood SES in adulthood on AUD, and explored whether the potential associations were confounded by shared familial factors, by using a co-relative control design.

Data on AUD was drawn from the Swedish inpatient and outpatient care registers; prescription drug register; and crime data. Through national population registers information on income, education and neighbourhood SES at age 25, 30, 35 and 40 years was collected in all individuals born in Sweden between 1950 and 1980. Each sex-specific stratum consisted of approximately 750,000–1,200,000 individuals, who were followed for AUD for a mean follow-up time ranging between 10 and 15 years until the end of 2013. Models were used to investigate the risk of AUD as a function of income, education and neighbourhood SES in the

general population and in pairs of first cousins and full siblings within the same sex, who differed in their exposure to the SES measure.

Higher educational level, higher income and higher neighbourhood SES were all associated with a reduced risk for AUD for both males and females in all ages. The potentially protective effect remained but was attenuated when comparing pairs of first cousins and full siblings.

High educational level and income in adulthood, as well as high neighbourhood socioeconomic status, may represent protective factors against alcohol use disorders, the authors conclude, even when shared familial factors, e.g. childhood socioeconomic status and genetic factors, have been taken into account.

**Source:** Socioeconomic status and alcohol use disorders across the lifespan: A co-relative control study. Susanna Calling, Henrik Ohlsson, Jan Sundquist, Kristina Sundquist, Kenneth S. Kendler. *PLOS.* Published: October 17, 2019. doi.org/10.1371/journal.pone.0224127



## Alcohol consumption and consequences in adolescents in 68 low and middle-income countries

Differences in the prevalence of alcohol use and consequences among adolescent boys and girls living in low and middle-income countries (LMIC) were estimated in a paper published in the *Journal Drug and Alcohol Dependence*.

The study included 271,156 students aged 13-17 years old and data were taken from a multi-staged cross-sectional international standardised self-report questionnaire administered in the classroom and the Global school-based student health survey (GSHS) based on adolescents from 68 LMIC between 2003-2014.

Alcohol measures included: past month alcohol consumption, history of intoxication and alcohol-related problems. Regions were based on the World Health Organization definitions: Africa, America, Eastern Mediterranean, Europe, South-east Asia, and Western Pacific.

Overall, males had higher odds of alcohol use (OR = 2.38 a history of intoxication (OR = 2.64), and alcohol-related problems (OR = 1.72 than females. All regions recorded overall greater odds of alcohol use by males versus females; five regions

(excluding Europe) recorded greater odds of intoxication in males; and three regions (America, South-east Asia, and Western Pacific) recorded greater odds of alcohol-related problems amongst males. The authors highlight however that in some countries, adolescent drinking rates and consequences were comparable by sex. Countries with the highest odds of alcohol use among males compared to females were Indonesia, Myanmar, Cambodia, Tuvalu, Morocco, Senegal, Kiribati, and Thailand.

Among adolescents living in LMIC, males had on average two-fold higher odds of drinking alcohol and experiencing adverse consequences. Growing affluence and improvements in sex equality in societies may increase the future prevalence of hazardous drinking in females in LMICs, the authors comment.

**Source:** Alcohol consumption and consequences in adolescents in 68 low and middle-income countries - a multi-country comparison of risks by sex. Leung J, Chiu V, Connor JP, Peacock A, Kelly AB, Hall W, Chan GCK. *Drug Alcohol Depend.* 2019 Oct 28;205:107689. doi.org/10.1016/j.drugalcdep.2019.107689.

## Age trends in alcohol use behaviour patterns among U. adults ages 18-65

Authors of a study examining the drinking patterns of US adults state that although much of the work on risky alcohol use behaviours, such as heavy drinking, focuses on adolescence and young adulthood, these behaviours are associated with negative health consequences across all ages. Existing studies on age trends have focused on a single alcohol use behaviour across many ages, using methods such as time-varying effect modelling, or a single age period with many behaviours, using methods such as latent class analysis. This study integrated aspects of both modelling approaches to examine age trends in alcohol use behaviour patterns across ages 18-65. Data from the National Epidemiologic Survey on Alcohol and Related Conditions-III were used to identify past-year alcohol use behaviour patterns among a nationally representative sample of U.S. 30,997 adults (51.1% women; 63.5% White Non-Hispanic) and flexibly estimate nonlinear trends in the prevalence of those patterns across ages 18-65.

Five patterns were identified: Non-Drinkers, Frequent Light Drinkers, Infrequent Heavy Episodic Drinkers, Frequent Heavy Episodic Drinkers, and Extreme Drinkers. Pattern prevalence were allowed to vary flexibly across the entire age range. Prevalence of the Infrequent Heavy Episodic and Extreme Drinkers peaked around ages 22-24, but peaked for Frequent Heavy Episodic Drinkers around age 49. Non-Drinkers were most prevalent across all ages except during the early 20s when Extreme Drinkers were more prevalent. Around ages 24-30, the Non-, Frequent Light, and Extreme Drinkers were approximately equally prevalent. The authors suggest that the approach used here holds promise for understanding characteristics associated with behaviour patterns at different ages and long-term age trends in complex behaviours.

**Source:** Age trends in alcohol use behaviour patterns among U.S. adults ages 18-65. Bray BC, Dziak JJ, Lanza ST. *Drug Alcohol Depend.* 2019 Oct 28;205:107689. doi.org/10.1016/j.drugalcdep.2019.107689.



## Public health cuts in England have hit poorest areas the hardest

Public health cuts have hit poorest areas the hardest, according to a new report from the Institute for Public Policy Research (IPPR), which reveals spending on areas such as sexual health, drug, alcohol and tobacco services has dropped by almost £900 million.

According to the report, areas with high levels of deprivation such as Blackpool, Liverpool and Birmingham have faced a disproportionate burden of these cuts despite having the greatest public health need. Of the £871.6m that has been cut from Whitehall's public health grant to local councils in England over the last five years, £1 in every £7 has been taken from budgets in the 10 poorest areas of the country. In contrast the 10

wealthiest areas have lost public health funding equivalent to just £1 in every £46.

The IPPR is calling for investment in public health services to tackle health inequality and deliver NHS savings, which can boost the economy more broadly, because preventing people falling ill in the first place is far more cost effective than treating illness and lengthy hospital stay. Other recommendations include reforming the funding formula - the mechanism used to decide the allocation of government money - making it designed to target funding at deprived communities with the greatest public health need. [ippr.org/blog/public-health-cuts](http://ippr.org/blog/public-health-cuts)

## UK alcohol clinical guidelines to be developed

PHE is working in partnership with the Department of Health and Social Care (DHSC) and the Scottish, Welsh and Northern Ireland governments to produce UK-wide clinical guidelines for alcohol treatment designed to provide support for alcohol treatment practice.

The main aim of the guidelines is to develop a clear consensus on good practice and help services to implement interventions for alcohol use disorders that are recommended by the National Institute for Health and Care Excellence (NICE). The aim is also to promote and support consistent good practice and improve the quality of service provision, resulting in better outcomes.

PHE will start this project in November 2019, and intend to publish the guidelines by the end of 2020. A UK-wide expert group will be convened of senior clinicians and service users and professionals with

specialist alcohol expertise who will oversee the development of the guidelines.

The guidelines will provide:

- a detailed framework for specialist service providers to support service delivery and staff training
- a framework for commissioners to use when designing service specifications and checking quality
- guidance for primary and secondary health care staff
- clear guidance on managing and supporting service user pathways, such as between hospital and community, and prisons and community
- a reference point for national regulatory bodies when inspecting alcohol treatment services.

[gov.uk/government/news/uk-alcohol-clinical-guidelines-development-begins](http://gov.uk/government/news/uk-alcohol-clinical-guidelines-development-begins)

## Support in the UK for a new Alcohol Strategy

A year after the Alcohol Charter was launched in the UK, an Early Day Motion was put forward in October to demonstrate support for a new UK Alcohol Strategy. The motion states "That this House reaffirms its support for the Alcohol Charter, which was launched on 16 October 2018 by the Drugs, Alcohol and Justice Cross-Party Parliamentary Group and the All-Party Parliamentary Group on Alcohol Harm; notes that the charter is now supported by 35 organisations; further notes with regret that there have been more than 10,000 alcohol-specific deaths in the UK since

the Government first promised to introduce an alcohol strategy; believes that the strategy should fully endorse the main recommendations of the charter; and calls on the Government to publish and implement its new alcohol strategy without further delay and consequential cost to human life.

The Early Day Motion currently has 19 signatures including 6 sponsors.

[edm.parliament.uk/early-day-motion/53371/alcohol-charter](http://edm.parliament.uk/early-day-motion/53371/alcohol-charter)



## Minimum price for alcohol in Wales

The Welsh government has published a report analysing the perceptions of service providers and service users on the potential consequences of introducing a minimum price for alcohol. The minimum price will become effective in Wales on 2 March 2020.

The report finds that, for the majority of drinkers, the only switching or change in use is likely to be alcohol related and largely an adaptation of existing behaviour. It was felt that for many drinkers, alcohol is a clear drug of choice and crossing over to drugs, and especially towards the margins of legal/illegal activity, was not considered to be an option.

There was a suggestion that switching between substances would be more likely to occur amongst certain groups. Street drinkers and those with prior experience of drug use were most commonly mentioned. If switching away from alcohol was to occur, it was predicted that this would most likely be to prescription medications. Only a few suggested a switch to cocaine or opiate use.

The study found that few drinkers had an accurate understanding of minimum pricing. The most prevalent attitudes were that:

- the principle of doing something about the availability and harm of alcohol was 'a good thing' and was indicative of the beginning of a 'cultural shift' in thinking about alcohol
- the introduction of a Minimum Unit Price of 50p (the Welsh Government's preferred level) would make very little overall difference to most people's drinking
- the group of individuals it would affect the most are potentially the most vulnerable.

For low-medium risk drinkers, the general feeling was that any increase in expenditure would be absorbed into existing budgets. However, a different scenario was anticipated for 'high risk/addiction likely' drinkers, and a range of potential coping mechanisms were predicted. There was some concern that many of these strategies could result in negative consequences for drinkers and the wider communities in which they live.

[gov.wales/minimum-pricing-alcohol-research-potential-consequences](http://gov.wales/minimum-pricing-alcohol-research-potential-consequences)

## Public alcohol ban by-law bid gathers 'mixed' response in Borders

A study into proposals for by-laws banning the consumption of alcohol in public places in the Borders of Scotland has received a "mixed" response. The local authority has been looking at the move for more than a decade. The latest consultation got nearly 500 responses. 44% of respondents said public drinking was not causing a problem, but 36% believed that it did and the Scottish Borders Council is being advised to take forward the proposals to a second stage, which would assess public opinion on whether a by-law should cover the whole region or possibly a pilot targeting the towns of Galashiels and Hawick.

Police said that weekend nights had the highest levels of alcohol-related anti-social behaviour. They added that by-laws in other regions had helped to reduce violence and the Borders was the only council area which did not have them.

NHS Borders commented that a ban could reduce the exposure of young people and children to alcohol.

[scottishborders.moderngov.co.uk](http://scottishborders.moderngov.co.uk)

## A quarter of motorists say new drink-driving laws in Ireland have influenced their behaviour

In a survey from CarsIreland.ie a quarter of drivers said that tighter drink-driving laws have impacted their behaviour when it comes to driving home after a night out.

The implementation of new measures as part of the Road Traffic Act were passed a year ago mean that drivers found to be over the drink drive limit face a three-month driving ban and a €200 fine. Around 25pc of the 1,000 people surveyed said they 'no longer feel safe to drive after having one drink' and that they are more cautious when it comes to driving the next morning.

Almost 65pc said the new laws have had no effect as they had never mixed alcohol and driving, and 10pc said the new rules had no effect on their behaviour whatsoever.

CarsIreland.ie's Sinead McCann said: 'Our survey has identified a significant shift in the mind-sets of a quarter of Irish drivers. These tougher laws are obviously having a positive effect on driver behaviour by promoting a zero tolerance culture when it comes to drink driving.'



## European Society for Prevention Research publishes position on ineffective and potentially harmful approaches in substance use prevention

A position paper from the European Society for Prevention Research emphasises that prevention methods using shock tactics are proven to be ineffective. Nevertheless, strategies based on predominantly providing information about the dangers of substance use are widespread in Europe.

The European Society for Prevention Research (EUSPR) is concerned about those so-called prevention strategies. It calls on decisionmakers, influencers and policymakers to use scientific proof of effectiveness as a criterion for exposing youth to prevention methods and not to spend public money on rather commercial offers, since there are better and less expensive alternatives.

The so-called shock tactics, controversial forms of informational approaches where strong imagery or testimony (also by ex-substance-users) about the consequences of substance use are conveyed to children and adolescents are ineffective and expensive. They may, however, be harmful, leading to reactions that are opposite to those aimed for, e.g. increasing the willingness of certain target groups to try drugs.

There is clear consensus in the scientific world that lack of information or lack of awareness about substance use dangers are not the risk factors leading to drug use or drug problems. Studies on the effect of prevention strategies even show that shock tactics and fear stimulus could a) awake sleeping dogs or b) actually be inspiring for those youngsters who are attracted by risk, danger and new sensations.

The report gives the example of the revolution train drug prevention project in the Czech Republic. It is a specially-equipped functioning train which guides 12-17 year olds through a touring exhibition on drugs. The children and adolescents are meant to experience the worst outcomes of substance use through appealing audio-visual techniques. The report states that 'it is an example of a prevention strategy that is counter-effective, but builds its sales tactics on satisfaction rates and dissemination volume instead of effectiveness studies'.

EUSPR calls on decisionmakers, influencers and policymakers at all levels to use scientific proof of effectiveness as a criterion for exposing our youth to prevention methods. Dissemination of programmes or projects that are harmful for the target group should be rejected. Recent tools available to help identifying quality standard interventions are: the European Prevention Curriculum, the Xchange registry and Best Practice Portal, all open source at the European Monitoring Center for Drugs and Drug Addiction (EMCDDA) and the International Standards of Drug Use Prevention at the United Nations.

The position paper is edited and approved by the Board of Directors. There will be an opportunity for members to contribute, comment and amend, to be published by the end of December

[euspr.org/wp-content/uploads/2019/10/European-prevention-researchers-call-to-avoid-harmful-prevention-methods-short-version.pdf](https://euspr.org/wp-content/uploads/2019/10/European-prevention-researchers-call-to-avoid-harmful-prevention-methods-short-version.pdf)

## Utah raises its restriction on the sale of beer

Utah will change its beer alcohol limits for the first time since the end of Prohibition, nearly a century ago.

Utah was one of two US states to retain a low limit on the strength of beer that could be sold. Lawmakers have raised the limit to 4% by weight. The change leaves Minnesota as the last state to have a limit of 3.2% for beer.

Low limits for the amount of alcohol in beer were originally set by Congress for the whole of the US to allow lighter brews to be made before the formal

end of Prohibition in 1933, but most states used it as a guide as they made their own laws, starting in the 1980s with the beginnings of the craft beer. Oklahoma, Colorado and Kansas were some of the last states making the switch in recent years.

In Utah, the state's predominant religious faith, the Church of Jesus Christ of Latter-day Saints, teaches abstinence from alcohol and strict liquor laws remain in place. In 2019, lawmakers passed the lowest DUI threshold in the country at 0.05%.



## 'Talking Clear' responsibility programme in Portugal

The Brewers of Portugal recently held an event as part of its 'Talking Clear' responsibility programme, in which social media influencers met in person with secondary-school students to talk about the harms of underage drinking.

In October, Cervejeiros de Portugal held a meeting with influencers and young people from secondary education in the Auditorium of the Augusto Gomes Secondary School, in Matosinhos. The initiative, part of the association's social responsibility project - Talking Clear - featured actor Tiago Teotónio Pereira and humorist and youtuber Diogo Batáguas.

Francisco Gírio, secretary general of Cervejeiros de Portugal, explained that "although alcohol consumption among adolescents in Portugal has declined in recent years, several studies show that the consumption of alcohol by minors is at an earlier age. The Brewers of Portugal have sought to continuously develop, in partnership with civil society and local communities, actions and tools

that help teachers and educators to address this issue and alert young people to the harms of early alcohol consumption."

"We know that influencers today have a great capacity to impact and influence young people's decision making, so we consider this strategic partnership to reach this target audience and enhance the effects of awareness raising actions like this one," added Gírio.

Cervejeiros de Portugal is one of the founding members of the Fórum Nacional Álcool e Saúde (FNAS), a platform led by SICAD / Ministry of Health in Portugal that brings together a wide range of civil society representatives who have committed themselves to developing relevant actions in this area of which the 'Speak Clear' project aims to warn of the dangers associated with early alcohol consumption.

[distribuicao hoje.com/producao/cervejeiros-de-portugal-quer-promover-consumo-consciente-de-bebidas-alcoolicas/](https://distribuicao hoje.com/producao/cervejeiros-de-portugal-quer-promover-consumo-consciente-de-bebidas-alcoolicas/)

## Campaign promotes zero consumption in pregnant women and nursing mothers in Spain

In Spain, The Alcohol and Society Foundation and the Spanish Association of Midwives have signed a collaboration agreement, lasting two years, to promote initiatives that contribute to encouraging zero consumption of alcoholic beverages in pregnant women and nursing mothers.

The agreement seeks to raise awareness among pregnant and breastfeeding women about the incompatibility of alcohol consumption at this stage of their life. Although the data suggests that the incidence of Fetal Alcohol Syndrome in Spain is minimal, both entities want to continue providing information so that this positive trend is maintained in our country.

"In the Alcohol and Society Foundation we have been working for 20 years to prevent alcohol consumption in minors through education, so this collaboration agreement will help us to delve deeper into this objective, also focusing on the unborn and in pregnant and nursing mothers" said the Director of Institutional Relations of the Alcohol and Society Foundation, Silvia Jato, after signing the agreement. In this way, the Alcohol and Society Foundation reinforces its priority work to protect minors.

The Spanish Association of Midwives has emphasised the care and protection needed by pregnant and nursing mothers, who must monitor their eating and consumption habits. Thus, the President of the Spanish Association of Midwives, Rosa María Plata, recalled that "consuming any type of alcoholic beverage during pregnancy can lead to a miscarriage or a variety of disabilities known as fetal alcohol spectrum disorders, so it is necessary to have information and bet on zero consumption of alcohol at this stage of life".

## Substance misuse in England 2018/19

Public Health England (PHE) have released the latest national statistics for substance misuse 2018/19, which show no significant change in the numbers receiving alcohol treatment.

These figures follow several years of declines in alcohol treatment. In 2018/19 the number of people receiving alcohol only treatment was 75,555 (versus 75,787 in 2017/18). PHE note this follows large year-on-year declines from a peak of 91,651 in 2013/14.

[gov.uk/government/statistics/substance-misuse-treatment-for-adults-statistics-2018-to-2019?utm](https://gov.uk/government/statistics/substance-misuse-treatment-for-adults-statistics-2018-to-2019?utm)



## Ontario government planning several changes to alcohol legislation

The Ontario Government has announced the introduction of a new omnibus bill that includes several proposed changes to alcohol legislation in the province.

The Better for People, Smarter for Business Act, 2019 features "over 80 proposed actions to eliminate unnecessary or outdated rules and streamline regulations that need updating," according to a government news release. These include changes to rules around the sale and consumption of alcohol, including the following:

- Allowing bars and restaurants at airports to serve alcohol 24 hours a day, an expansion from the current hours of 9:00 AM to 2:00 AM.
- Dropping exemption limits on the amount of beer and other beverage alcohol that individuals can bring into Ontario from other provinces for personal consumption.

## Éduc'alcool launches its latest campaign on pregnancy and drinking

In its sixth campaign on pregnancy and drinking, Éduc'alcool once again reminds pregnant women and those hoping to conceive that, when it comes to the health of the fetus, it's best to take no risk at all.

This year, following a number of mass media awareness campaigns, Éduc'alcool is narrowing its focus, taking more direct aim at pregnant women and those who want to become pregnant. "We have had considerable success in boosting awareness of the recommendation not to drink, and encouraging a pregnant woman's community to support her decision to abstain from alcohol. Now it's time to engage pregnant women through dialogue and conversation, to remind them of this important message and to further convince them without judging, scaring or blaming them," continued Hubert Sacy.

The campaign includes articles on healthy habits for pregnant women, as well as facts and fiction about pregnancy and drinking. Also on the menu: recipes for Holiday and summertime mocktails.

An ad will be placed in the Livret de grossesse, passeport vers la vie, a "pregnancy passport"

## Minimum pricing in Kenya

In October the Kenya Revenue Authority sent a letter to the country's alcohol distillers advising them to comply with minimum pricing that applies to some spirits.

The letter stated that alcohol products retailing at prices below Ksh150 per bottle of 250ml of 40 per cent alcohol concentration are considered non-compliant with the minimum taxed based cost structure. The authority ordered manufacturers to comply with the minimum price order within a seven day period that already elapsed.

Distillers failing to comply with the KRA directive could risk losing their operating licenses or having their products impounded. KRA Commissioner for Domestic Taxes Elizabeth Meyo stated that the new directive was put in place to stop tax avoidance and boost revenue.

The Competition Authority of Kenya has questioned the move, saying that it breaches a set of antitrust law regulations that bar the setting of binding prices.

given to pregnant women in clinics, CLSCs and other health establishments in Quebec. The ad encourages women to read the informative publication produced jointly by Éduc'alcool and the Quebec College of Physicians, called Pregnancy and Drinking: Your Questions Answered. Banner ads will also appear online.

Videos will be placed on various websites, in online newsletters and in social media, with banner ads also delivering the message. In addition, an e-newsletter will go out to the 50,000 people who subscribe to Maman pour la vie/Mother for life.

Éduc'alcool's campaign will include a monthly quiz (one question a month for 12 months) at the Maman pour la vie/Mother for life Facebook page; the same monthly quiz question will appear in the e-newsletter sent to mothers-to-be.

"This is a non-paternalistic, non-judgmental campaign with a distinctive esthetic that targets a particular audience and focuses on dialogue and interaction. Gently and respectfully provocative, it is designed to attract attention and deal with real issues," concluded Director General Hubert Sacy.

[educalcool.qc.ca](http://educalcool.qc.ca)



## Vietnam – Alcohol law to be implemented from 2020

Vietnam recently held a workshop to prepare for the implementation of the new alcohol prevention and control law. The law was passed by the National Assembly on June 14, 2019 and will take effect from the beginning 2020. With the law's implementation, the following actions will be banned in Vietnam:

- Inciting, encouragement and forcing others to consume alcohol,
- Sale of alcohol to people under the age of 18,
- Use of alcohol as promotion materials for people under 18 years of age,
- Alcohol consumption by public officials, students, members of the armed forces before and during working hours,
- Advertising of alcohol from 6pm-9pm on radio and TV,
- Operating motorised means of transport under the influence of alcohol.

[iogt.org/news/2019/11/01/vietnam-readying-new-alcohol-law-for-implementation/](http://iogt.org/news/2019/11/01/vietnam-readying-new-alcohol-law-for-implementation/)

## US legislation could require new vehicles to have alcohol detectors

A new push is underway for federal legislation that would require new US vehicles to have alcohol-detecting devices that stop drivers who are over the alcohol limit from starting their vehicles.

The measure, backed by Mothers Against Drunk Driving (MADD), would require manufacturers of cars and trucks to include ignition interlocks in all vehicles. Currently the ignition interlock is likely to be a breathalyser-like device, however, researchers and engineers have been working to develop newer technology that would obtain instantaneous and precise readings of every driver's blood alcohol level when the driver attempts to start the vehicle.

Safety advocates hope the technology will become as standard as air bags and limited road testing has been underway in Maryland and Virginia.

The Reduce Impaired Driving for Everyone Act, or RIDE Act, co-sponsored by Senators Tom Udall and Rick Scott, could provide additional funding for continued research and road-testing of passive detection systems and set a timeline of about four years to put the technology on the market.

NHTSA has spent \$50m (£39m) in the effort to develop technology that would reliably and quickly determine whether a driver is impaired. These efforts include a government-funded research programme involving more than a dozen car manufacturers to develop the Driver Alcohol Detection System for Safety (DADSS).

[washingtonpost.com/transportation/2019/10/16/bill-would-require-new-vehicles-have-alcohol-detectors-fight-drunken-driving/](http://washingtonpost.com/transportation/2019/10/16/bill-would-require-new-vehicles-have-alcohol-detectors-fight-drunken-driving/)

## Deutsche Weinakademie advertising seminar

In October, the Deutsche Weinakademie (DWA) organised an advertising seminar in Mainz, Germany. The speakers Ms Katja Heintschel von Heinegg (German Advertising Standards Council) and Dr Claudia Stein-Hammer (DWA) gave presentations on how to plan and implement responsible wine advertising.

Dr Claudia Stein-Hammer launched the discussion by providing insight on the political framework, national legislation and self-regulation in Germany and examples on what the legislative landscape looks like in other countries around Europe.

A list of best practices was introduced together with specific information as to what is best avoided, encouraging the participants to include the responsible consumption of wine in all communication.

Ms Heintschel von Heinegg introduced the German Advertising Standards Council and illustrated her presentation with some practical examples on how advertising can slide into grey areas. She described the self-regulation code to which the entire German alcoholic beverage sector has committed to adhere to; and gave examples of how companies can demonstrate responsibility on their website (age restrictions, etc.).

The afternoon ended with an interactive and practical exercise where participants were invited to vote to decide whether the presented advertising could be maintained or if it would be subject of complaints.

[wineinmoderation.eu/de/articles/The-Deutsche-Weinakademie-organises-seminar-on-responsible-advertising-of-wine.337/](http://wineinmoderation.eu/de/articles/The-Deutsche-Weinakademie-organises-seminar-on-responsible-advertising-of-wine.337/)



## Health at a Glance 2019 OECD Indicators

The latest Health at a Glance report from the OECD compares key indicators for population health and health system performance across OECD members, candidate and partner countries. It highlights how countries differ in terms of the health status and health-seeking behaviour of their citizens; access to and quality of health care; and the resources available for health. Analysis is based on the latest comparable data across 80 indicators.

Alongside indicator-by-indicator analysis, an overview chapter summarises the comparative performance of countries and major trends, including how much health spending is associated with staffing, access, quality and health outcomes. The chapter dedicated to alcohol shows that, measured through sales data, overall alcohol consumption averaged 8.9 litres per person across OECD countries in 2017, down from 10.2 litres in 2007. Lithuania reported the highest consumption (12.3 litres), followed by Austria, France, the

Czech Republic, Luxembourg, Ireland, Latvia and Hungary, all with over 11 litres per person. Turkey, Israel and Mexico have comparatively low consumption levels (under 5 litres per person). Among key partners, consumption was relatively high in the Russian Federation (11.1 litres) and low in Indonesia, India, Costa Rica and Colombia (less than 5 litres).

Average consumption fell in 27 OECD countries between 2007 and 2017, with the largest reductions in Israel, Estonia, Greece and Denmark (by 3 litres or more). Consumption also fell markedly in the Russian Federation (by 7 litres). However, alcohol consumption increased by more than 1 litre per person in China and India, and by over 0.5 litres per person in Chile.

While overall consumption per capita helps assess long-term trends, it does not identify sub-populations at risk from harmful drinking patterns. On average across OECD countries, 3.7% of adults

Figure 4.4. Recorded alcohol consumption among adults, 2007 and 2017 (or nearest year)

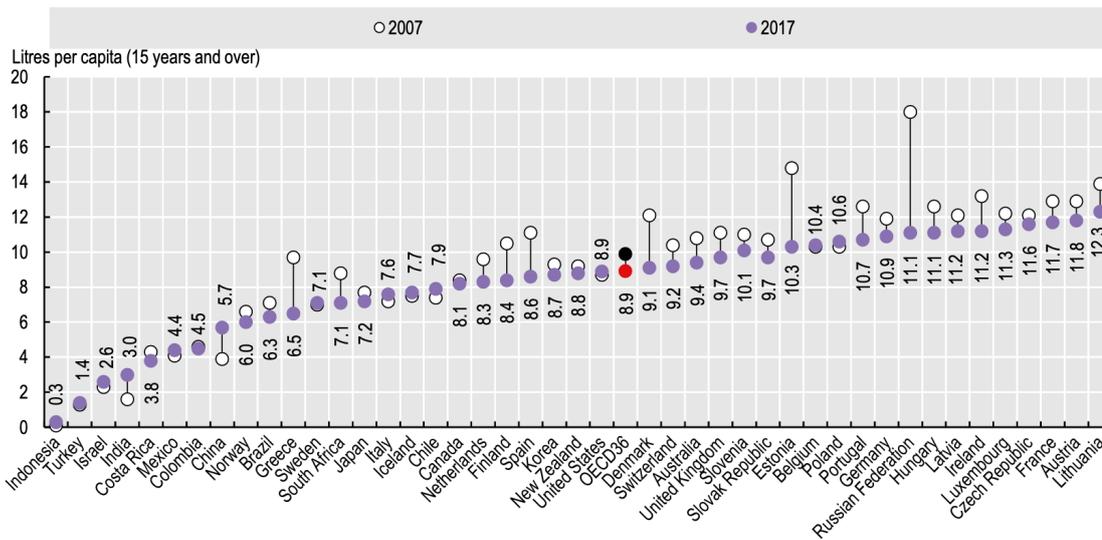
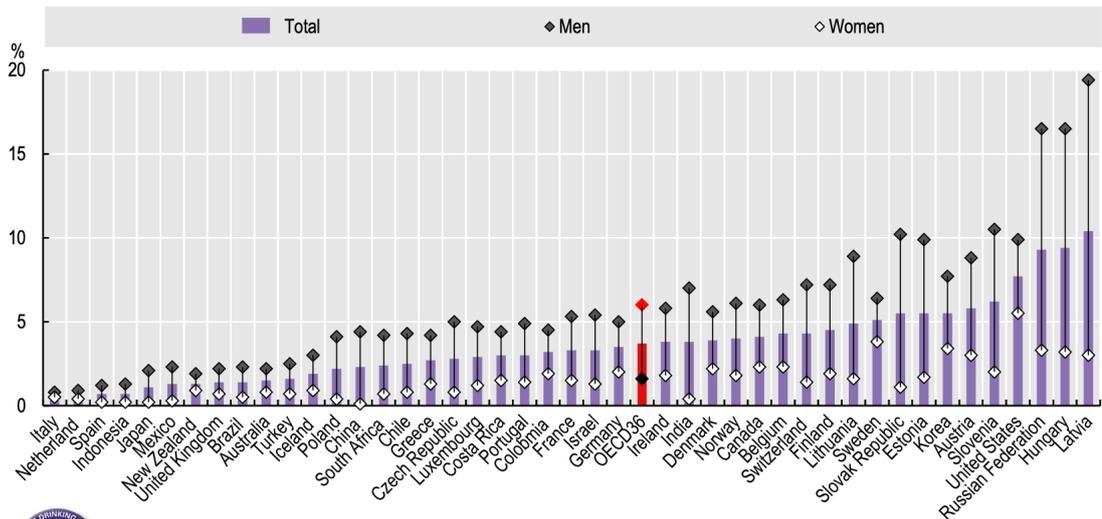


Figure 4.5. Share of dependent drinkers, by sex, 2016



were alcohol dependent in 2016. In all countries, men are more likely to be alcohol dependent, with 6% of men and 1.6% of women alcohol dependent on average. Dependence is most common in Latvia, Hungary, and Russian Federation (more than 9% of adults). In these three countries, gender gaps are also high, with the share of alcohol dependent men about five times higher than for women. The share of dependent drinkers does not always correlate



with overall alcohol consumption levels, reflecting differences in consumption patterns and diagnosis of alcohol dependence. France, for instance, had the third highest alcohol consumption in 2017, yet rates of alcohol dependence below the OECD average. Conversely, the United States has a high share of alcohol dependence in 2016 (7.7%), but recorded consumption is at the OECD average.

Policies addressing harmful alcohol use include broad-based strategies and ones that target heavy drinkers. All OECD countries apply taxes to alcoholic beverages, but the level of taxes differs greatly. In addition, some countries have implemented new forms of pricing policies, such as minimum

pricing for an alcohol unit in Scotland. Advertising regulations exist in most OECD countries, but law enforcement and the forms of media included in these regulations (e.g. printed newspapers, billboards, the internet and TV) varies. In Norway, Lithuania and Sweden, for instance, there are complete bans on TV adverts, including on social media, while other countries set partial limitations. Controls on the physical availability, drinking age and hours of sale; and drink-driving rules are other commonly used policies.

[oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2019\\_961753cf-en](http://oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2019_961753cf-en)

## Uganda approves Alcohol Control Policy

Ugandan authorities have approved the National Alcohol Control Policy in a bid to tackle alcohol misuse. Until now, Uganda has had no written alcohol policy, and still has scarce regulation of alcohol availability and advertising. The new Alcohol policy addresses several key issues: intoxication, public safety, health impacts, the availability of alcohol, and research into alcohol abuse.

In an effort to combat drink-driving, a major cause of road accidents in the country, the policy requires an increase in the number of breath-testing checkpoints for drivers and recommends the suspension of offenders' driving licenses. A multi-sectoral task force launched by Kyambadde will

be enforcing the ban, including officials from the ministries of health, internal affairs, finance, trade, education and local government. Also involved is the Uganda Revenue Authority (URA), which is currently deploying its own campaign to combat the sale of illicit and contraband beverages.

Parallel to Uganda's newly-codified national alcohol policy and the ban on alcohol sachets is the installation of a new system that has proven highly successful in neighbouring Kenya: the introduction of digital tax stamps, allowing consumers and retailers alike to verify that certain products are genuine—and that tax has been paid on them. Uganda's similar tax stamp system is due to take effect from 1 November 2019.

## Web-based consultation on the implementation of the WHO global strategy to reduce the harmful use of alcohol



At the World Health Assembly in May 2019, a request was made for the WHO Director-General to “report to the Seventy-third World Health Assembly in 2020, through the Executive Board, on the implementation of WHO’s global strategy to reduce

the harmful use of alcohol during the first decade since its endorsement, and the way forward”.

To this end, the WHO Secretariat hosted a web-based consultation from 24 October 2019 until 4

November 2019 on a discussion paper dated 21 October 2019. Member States, UN organizations and non-State actors were invited to submit their comments through a dedicated web page or by e-mail.

All relevant contributions have been published on the WHO website and will be considered in the process of developing the report and may serve as an input for informal consultation with Member States on the discussion paper scheduled for 11th November 2019.

[who.int/docs/default-source/alcohol/2010-strategy/discussion-paper.pdf](http://who.int/docs/default-source/alcohol/2010-strategy/discussion-paper.pdf)

[who.int/health-topics/alcohol/online-consultation](http://who.int/health-topics/alcohol/online-consultation)

**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.

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

**Helena Conibear**, Executive and Editorial Director, AIM-Alcohol in Moderation, UK

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

**Professor R. Curtis Ellison**, Chief, Emeritus, Section of Preventive Medicine & Epidemiology; Professor of Medicine, Boston University School of Medicine, US

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

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

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

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

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

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

**Arthur Klatsky MD**, adjunct investigator at the Kaiser Permanente Northern California Division of Research, US

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

**Ellen Mack MD**, Oncologist

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

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

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

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

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

**Creina S Stockley PhD, MBA**, Principal, Stockley Health and Regulatory Solutions; Adjunct Senior Lecturer, The University of Adelaide

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

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

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

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

