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## Finland

The Finnish police have released statistics indicating that approximately 90% of Finnish drink drivers are male. While the number of male drink drivers has declined by 6,000 during the last five years, female drink drivers only account for 2,700 of the current annual total of 21,500 apprehended drink drivers.

## Vietnam

Ho Chi Minh City officials have proposed that police place breathalyzer checkpoints outside of restaurants in order to discourage patrons from driving after consuming alcohol. Critics contend that the presence of police checkpoints would discourage patrons from visiting restaurants and lead to corrupt targeting practices.

## Cyprus

In Cyprus, the Road Safety Council has decided to adopt the European recommendation to drastically reduce the permitted alcohol limit for novice drivers, motorcyclists and drivers of trucks, buses and taxis to 0.2g/l.

Transport Minister Tasos Mitsopoulos said young people's innate tendency to adopt risky behaviours and their inexperience driving, coupled with being unused to alcohol make them particularly vulnerable.

## Switzerland

Against the advice of the Federal Government, the Upper House of the Swiss Parliament has approved legal provision for a minimum unit pricing and a tax break for Swiss alcohol producers.

## Australia

People who are intoxicated and disorderly on Sydney's streets could find themselves locked in a sobering-up centre as part of a New South Wales Government trial in Sydney's CBD and the eastern suburbs. The mandatory centre in the CBD will be set up in police cells and run by officers, while another in Coogee will be operated by a non-government agency.

Last Drinks Coalition spokesman and Midwives Association secretary Brett Holmes says it is a haphazard approach that will put safety at risk. "Police will be faced with making a complex medical diagnosis they're not trained to conduct, on the streets," he said.

## Italy

In Venice, the city's famed gondoliers could soon be forced to take drug and alcohol tests.

Venice council has received a series of complaints about the boatmen's allegedly unruly behaviour. "Gondoliers represent our city in the world and must therefore respect historical and traditional values, as well as human dignity," a group of councillors said in a statement.

Nicola Falconi, the president of the gondoliers' association called for gondoliers to undergo ad hoc drug and alcohol testing, adding that the tests should apply not just to gondoliers but other people using Venice's crowded canals, including the drivers of vaporetti water buses.

## Alcohol intake and prognosis of atrial fibrillation patients

A study from Denmark assessed alcohol intake as a risk factor for adverse events among patients with incident atrial fibrillation (AF). The population based cohort study was based on 57 053 participants (27 178 men and 29 875 women) aged between 50 and 64 years from the Danish Diet, Cancer and Health study included. The study population included the 3107 participants (1999 men, 1108 women) who developed incident AF after inclusion in the study.

During a median follow-up of 4.9 years, 608 deaths and 211 thromboembolic events occurred. Of those who developed AF, 690 (35%) men and 233 (21%) women had a high intake of alcohol (>20 drinks/week for men and >13 drinks/week for women). After adjustment for use of oral anticoagulation and components of the CHA2DS2-VASc score (score for atrial fibrillation stroke risk), men with an intake of >27 drinks/week had a higher risk for thromboembolism or death (hazard ratio (HR) 1.33, 95% CI 1.08 to 1.63)

than men with an intake of <14 drinks/week. Women with an intake of >20 drinks/week also had a higher risk (HR 1.23, 95% CI 0.78 to 1.96) than women in the low intake category. The higher risk among men was primarily driven by mortality (HR 1.51, 95% CI 1.20 to 1.89), whereas the risk found among women was driven by thromboembolism (HR 1.71, 95% CI 0.81 to 3.60).

The authors conclude that high alcohol intake predicts thromboembolism or death, even after adjustment for established clinical risk factors, and may help identify high risk AF patients who could be targeted for stroke and cardiovascular prevention strategies.

Source: Alcohol intake and prognosis of atrial fibrillation patients Thure Filskov Overvad, Lars Hvilsted Rasmussen, Flemming Skjøth, Kim Overvad, Ida Ehlers Albertsen, Deirdre A Lane. *Heart*. 2013 Aug;99(15):1093-9. Epub 2013 Jun 13.

## Prenatal alcohol exposure and educational achievement in children Aged 8–9 Years

A study examined the relationships between the dose, pattern, and timing of prenatal alcohol exposure and achievement in reading, writing, spelling, and numeracy in children aged 8 to 9 years.

Data from a randomly selected, population-based birth cohort of infants born to non-Indigenous women in Western Australia between 1995 and 1997 (n = 4714) (Randomly Ascertained Sample of Children born in Australia's Largest State Study cohort) were linked to the Western Australian Midwives' Notification System and the Western Australian Literacy and Numeracy Assessment statewide education testing program. The records for 86% (n = 4056) of the cohort were successfully linked with education records when the children were aged 8 to 9 years.

The associations between prenatal alcohol exposure and achievement of national benchmarks in school numeracy, reading, spelling, and writing tests and nonattendance for the tests was examined. Logistic regression was used to generate adjusted odds ratios

(aOR) and 95% confidence intervals (CI), adjusting for potential confounding factors. The referent group included children of mothers who previously drank alcohol but who abstained during pregnancy.

Children were twice as likely not to achieve the benchmark for reading after heavy prenatal alcohol exposure during the first trimester (aOR 2.26; 95% CI 1.10–4.65) and for writing when exposed to occasional binge drinking in late pregnancy (aOR 2.35; 95% CI 1.04–5.43). Low-moderate prenatal alcohol exposure was not associated with academic underachievement.

The type of learning problems expressed depends on the dose, pattern, and timing of prenatal alcohol exposure.

Source: Prenatal Alcohol Exposure and Educational Achievement in Children Aged 8–9 Years. Colleen M. O'Leary, Cate Taylor, Stephen R. Zubrick, Jennifer J. Kurinczuk, and Carol Bower. *Pediatrics* peds.2012-3002; published ahead of print July 8, 2013, doi:10.1542/peds.2012-3002.

## Potential association of alcohol consumption with diverticulosis

Sharara AI, El-Halabi MM, Mansour NM, Malli A, Ghaith OA, Hashash JG, Maasri K, Soweid A, Barada K, Mourad FH, El Zahabi L. Alcohol consumption is a risk factor for colonic diverticulosis. *J Clin Gastroenterol* 2013;47:420–425.

### Authors' Abstract

**Background and Aim:** The exact factors predisposing to colonic diverticulosis other than age are unknown.

**Methods:** Cross-sectional study of asymptomatic subjects undergoing screening colonoscopy. A detailed dietary and social questionnaire was completed on all participants. A worldwide review of the literature was performed to further investigate any association between identified risk factors and diverticulosis.

**Results:** Seven hundred forty-six consecutive individuals were enrolled (mean age, 61.1±8.3 y; female: male=0.98). Overall, the prevalence of diverticulosis was 32.8% (95% CI, 29.5–36.2). Diverticula were left-sided, right-sided, or both in 71.5%, 5.8%, and 22.7% of affected subjects, respectively. On univariate analysis, age, sex, adenomatous polyps, advanced neoplasia (adenoma ≥1 cm, villous histology, or cancer), aspirin, and alcohol use were significantly associated with diverticulosis. Diet, body mass index, physical activity, and bowel habits were not associated with the disease. On multivariate analysis, increasing age ( $P<0.001$ ), advanced neoplasia ( $P=0.021$ ), and alcohol consumption ( $P<0.001$ ) were significantly associated with diverticulosis. The adjusted odds ratio for diverticulosis in alcohol users was 1.91 (1.36 to 2.69), with increasing prevalence with higher alcohol consumption ( $P$ -value for trend=0.001). When the prevalence of diverticulosis reported from 18 countries was analyzed against alcohol use, there was a strong correlation with national per-capita alcohol consumption rates (Pearson correlation coefficient  $r=0.68$ ;  $P=0.002$ ).

**Conclusions:** Alcohol use is a significant risk factor for colonic diverticulosis and may offer a partial explanation for the existing East-West paradox in disease prevalence and phenotype. Further studies are needed to investigate this association and its putative pathophysiological mechanisms.

### Forum Comments

The etiology of diverticulosis of the colon is poorly understood. Many, but not all, studies suggest that low fibre intake and obesity increase the risk. The large Health Professional Follow-up Study of almost 50,000 subjects found a lower risk to be associated with increased physical exercise and the intake of soluble fiber, and no increase from alcohol consumption.

This paper tests the cross-sectional association of alcohol consumption with diverticulosis among 746 asymptomatic consecutive subjects undergoing screening colonoscopies in Lebanon. In a pre-screening questionnaire, subjects reported the intake of several dietary constituents, as well as alcohol, with about one-half of subjects being lifetime abstainers. Most of the “drinkers” stated that they consumed alcohol occasionally or < 1 drink/day; only about 10% reported one or more drinks/day. No data on type of beverage or pattern of drinking were available. From their cross-sectional analyses, the authors conclude that alcohol consumption raises the risk of diverticulosis.

### Specific comments on paper by Forum members:

This study found a fairly high prevalence of diverticulosis (32.8%) among their subjects, a rate that is similar to many studies in Europe and North America, but higher than the prevalence found in Africa and Asia. There were some deficiencies in the study, such as a relatively small number of subjects, with low prevalence of drinking more than occasionally or < 1 drink/day; this limits its applicability to most western populations. Further, the investigators had very limited data on diet, and no specific data on fiber intake; it was a cross-sectional comparison between alcohol and diverticulosis, so causation cannot be determined.

Reviewer Ellison noted that there were no data on the ethnicity of subjects: “Given that Lebanon has a mixture of ethnic groups (including Muslims, who generally do not drink), it would have been interesting to see a break-down of effects by such groups; diet and other environmental factors, as well as alcohol intake, surely varied by ethnic group. Also, the authors’ use of an inter-country comparison of per-capita alcohol intake and reported diverticulosis has no relevance: there are large cultural differences between nations with high and those with low per-capita alcohol intake, and alcohol use may well have been just a marker for a western-type culture.”

Despite what the authors state, no dose-dependent effect is seen in the multivariate analysis (OR 1.96 for occasional/< 1 drink/day, 1.91 for ≥ 1 drink/day). Further, no description is given for the distribution of alcohol intake within the two drinker categories, so the effects of the pattern of drinking or binge

drinking, both of which strongly affect health, cannot be estimated.

With a high percentage of abstainers in this population, the lack of data on the ethnicity of subjects, and no data on drinking patterns or type of alcohol, Forum members considered that this paper should be interpreted as raising a question about alcohol and diverticulosis, but certainly provides no answers. Most Forum members suggested that the association reported could well relate to uncontrolled confounding by other lifestyle factors.

Potential mechanisms by which alcohol could affect risk of diverticulosis: Forum member Skovenborg commented on potential mechanisms by which alcohol might relate to diverticulosis. "The authors quoted an early study from Salt Lake City to the effect that alcohol inhibits recto-sigmoid motility in humans (Berenson MM, Avner DL. Alcohol inhibition of rectosigmoid motility in humans. *Digestion* 1981;22:210–215). However, the clinical relevance of an acute intravenous alcohol infusion with a blood alcohol level of 140 mg/100 ml is questionable for a study where the association of alcohol consumption and colonic diverticulosis was similar in people with occasional alcohol use and people drinking  $\geq 1$  drink per day."

Skovenborg continued: "An Italian study showed a significant prolongation of the oro-cecal transit time, both in patients with alcoholism and in social drinkers, as compared with teetotaler subjects (Addolorato G et al. Influence of alcohol on gastrointestinal motility: lactulose breath hydrogen testing in orocecal transit time in chronic alcoholics, social drinkers and teetotaler subjects. *Hepatogastroenterology* 1997;44:1076-1081). In contrast, another Italian study found no statistically significant difference of the oro-cecal transit time between moderate alcohol drinkers and teetotalers (Papa A et al. Effect of moderate and heavy alcohol consumption on intestinal transit time. *Panminerva Medica* 1998;40:183-185). According to a German study, all alcoholic beverages are not equal regarding their effect on gastrointestinal motility. Pfeiffer et al investigated the comparative effect of beer (7.0% v/v), with wine (7.5% v/v), ethanol (7.5% v/v), and water on the gastric emptying of a liquid test meal and on the gastro-cecal transit time of lactulose added to the test meal. The gastro-cecal transit time was significantly shorter when the liquid meal was administered with beer or wine compared

with ethanol and water (Pfeiffer A, Kaess H. Effect of ethanol and commonly ingested alcoholic beverages on gastric emptying and gastrointestinal transit. *Clin Investig* 1992;70:487-491)." All of these factors illustrate the lack of a plausible pathophysiological mechanism for the reported association between and diverticulosis, and raise the question of confounding by other factors.

Reviewer Ursini questioned how many of the Hill criteria of causality are met. "When does an association become a cause? (I'll never forget the extremely low P value for the relation of the number of storks in the Alps to birth rate in Germany!)" He added that the strength of the association, biological gradient, consistency with other studies, temporality, and several other of the Hill criteria are not met in determining causality in these analyses. Stated Forum member Thelle, "The association observed in a cross-sectional study cannot be considered a direct cause — at the best, it can be used to generate a hypothesis." Adds Forum member Goldfinger: "An interesting association, but in and of itself, lackluster with respect to significant conclusions. In the absence of robust plausible biologic mechanisms, any suggestion that there may be a causal relationship will require more work."

### Forum Summary

The etiology of diverticulosis of the colon is poorly understood. Many, but not all, studies suggest that low fibre intake and obesity increase the risk; few studies have evaluated the relation of alcohol consumption and diverticulosis, with inconclusive results. This paper tests the cross-sectional association of alcohol consumption with diverticulosis among 746 asymptomatic consecutive subjects undergoing screening colonoscopies in Lebanon.

One-half of the subjects in this study were abstainers. Most of the "drinkers" stated that they consumed alcohol occasionally or  $< 1$  drink/day; only about 10% reported 1 or more drinks/day, and no data on type of beverage or pattern of drinking were available. Nevertheless, from their analyses the authors conclude that alcohol consumption raises the risk of diverticulosis.

Forum members considered that this cross-sectional analysis provides little support for a causative effect of alcohol on the risk of diverticulosis. Most larger

observational studies have not shown such an effect. In the present study, about 90% of subjects were either abstainers or consumed alcohol only occasionally or averaged < 1 drink/day. Further, the investigators did not evaluate the pattern of drinking (including binge drinking) and the results do not support an increase in risk with greater drinking (lack of a dose-response relation). Mechanisms for such an effect are largely unknown. Thus, few of the Hill criteria for "causality" are met.

The authors' use of an inter-country comparison of per-capita alcohol intake and reported diverticulosis has no relevance: there are large cultural differences between nations with high and those with low per-capita alcohol intake, and alcohol use may well have been just a marker for a western-type culture. While the present study could be used to generate an hypothesis of a relation of alcohol intake to diverticulosis, attempts to validate such an association will require much additional research.

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

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## The effects of low to moderate alcohol consumption and binge drinking in early pregnancy on behaviour in 5-year-old children

A study from the Department of Public Health, University of Copenhagen, Copenhagen, Denmark examined the effects of low to moderate maternal alcohol consumption and binge drinking in early pregnancy on behaviour in children at the age of 5 years.

A total of 1,628 women and their children sampled from the Danish National Birth Cohort were included in the study, based on maternal alcohol drinking patterns during early pregnancy. When the children were 5 years of age the parent and teacher versions of the Strengths and Difficulties Questionnaire (SDQ) were completed by the mothers and a preschool teacher, respectively. The full statistical model included the following potential confounding factors: maternal binge drinking or low to moderate alcohol consumption, respectively; parental education; maternal IQ; prenatal maternal smoking; the child's age at testing; the child's gender; maternal age; parity; maternal marital status; family home environment; postnatal parental smoking; prepregnancy maternal body mass index (BMI); and the child's health status.

After results were adjusted for all potential confounding factors, no statistically significant associations were observed between maternal low to moderate average weekly alcohol consumption and SDQ behavioural scores (OR 1.1, 95% CI 0.5-2.3; OR 1.1, 95% CI 0.6-2.1 for the total difficulties scores) or between binge drinking and SDQ behavioural scores (OR 1.2, 95% CI 0.8-1.7; OR 0.8, 95% CI 0.6-1.2).

This study therefore observed no consistent effects of low to moderate alcohol consumption or binge drinking in early pregnancy on offspring behaviour at the age of 5 years.

**Source:** The effects of low to moderate alcohol consumption and binge drinking in early pregnancy on behaviour in 5-year-old children: a prospective cohort study on 1628 children. Skogerbø A, Kesmodel U, Denny Ch, Kjaersgaard M, Wimberley T, Landrø N, Mortensen E. BJOG: An International Journal of Obstetrics & Gynaecology Volume 120, Issue 9, pages 1042-1050, August 2013.

## Effects of genetic factors on metabolism of alcohol

Israel Y, Rivera-Meza M, Karahanian E, Quintanilla ME, Tampier L, Morales P, Herrera-Marschitz M. Gene specific modifications unravel ethanol and acetaldehyde actions. *Front Behav Neurosci* 2013;7:80.doi:10.3389/fnbeh.2013.00080

### Authors' Abstract

Ethanol is metabolized into acetaldehyde mainly by the action of alcohol dehydrogenase in the liver, while mainly by the action of catalase in the brain. Aldehyde dehydrogenase-2 metabolizes acetaldehyde into acetate in both organs. Gene specific modifications reviewed here show that an increased liver generation of acetaldehyde (by transduction of a gene coding for a high-activity liver alcohol dehydrogenase ADH1\*B2) leads to increased blood acetaldehyde levels and aversion to ethanol in animals. Similarly aversive is an increased acetaldehyde level resulting from the inhibition of liver aldehyde dehydrogenase-2 (ALDH2) synthesis (by an antisense coding gene against *aldh2* mRNA).

The situation is diametrically different when acetaldehyde is generated in the brain. When the brain ventral tegmental area (VTA) is endowed with an increased ability to generate acetaldehyde (by transfection of liver rADH) the reinforcing effects of ethanol are increased, while a highly specific inhibition of catalase synthesis (by transduction of a shRNA anti catalase mRNA) virtually abolishes the reinforcing effects of ethanol as seen by a complete abolition of ethanol intake in rats bred for generations as high ethanol drinkers. Data shows two divergent effects of increases in acetaldehyde generation: aversive in the periphery but reinforcing in the brain.

### Forum Comments

This paper presents an excellent summary of the effects of genetically determined enzymes that affect the metabolism of alcohol; such factors relate strongly to both the rewarding and the aversive effects of alcohol. Of almost 100 genes that have been found to relate to alcohol metabolism, the two major ones appear to be alcohol dehydrogenase and aldehyde dehydrogenase. The authors describe the metabolism of alcohol into acetaldehyde by alcohol dehydrogenase, and then focus especially on the metabolism of acetaldehyde by aldehyde dehydrogenase-2.

Previous studies have shown that 20-40% of individuals of East Asian origin have a point mutation in the genes that code for high affinity aldehyde dehydrogenase-2; such people tend to show high levels of acetaldehyde and develop flushing,

tachycardia, headache, nausea, and emesis from even small amounts of alcohol. Being very intolerant of alcohol, they are at very low risk of alcohol abuse. This mutation is much less common among European and North American populations.

Most of the studies described in this paper were carried out in Wistar-derived rats selectively bred for over 80 generations, which led to two lines of rats: the UChA (abstainer) and the UShB (bibulous). Other data suggest similar relationships among humans for the activity of liver-generated aldehyde dehydrogenase. However, some Forum reviewers stressed that there are limitations in our current knowledge about the metabolism of alcohol or acetaldehyde in the brain among humans, indicating the need for further research in humans.

The authors summarize their extensive review of the literature by stating: "An increased liver generation of acetaldehyde, leading to increased blood acetaldehyde levels, results in aversion to ethanol in animals. Similarly, aversion to ethanol results from an increased acetaldehyde level resulting from the inhibition of liver aldehyde dehydrogenase-2 synthesis." They go on to indicate that the situation is different when acetaldehyde is generated in the brain, stating that there are "two divergent effects of increases in acetaldehyde generation: aversive in the periphery but reinforcing in the brain." As alcohol dehydrogenase is not expressed in the brain, interactions of alcohol and acetaldehyde in the brain may result primarily by a catalase mechanism.

The authors also describe what is known as the "alcohol deprivation effect," in which animals given alcohol over a period of time, then deprived of alcohol, tend to drink excessively when alcohol is reintroduced. Drugs given to inhibit catalase activity block the excessive drinking when alcohol is reintroduced. The authors state that this suggests possible therapeutic avenues in the treatment of alcoholism, although extensive further research is needed.

Importance of these findings in relation to alcohol abuse: As pointed out by Forum reviewers Van Velden and Kotze, "Alcoholism is a huge problem worldwide, and we need to understand this addiction better if we want to combat this negative effect of alcohol consumption in humans. Alcohol use disorders (AUD) involving hazardous, harmful, and addictive misuse of alcohol are widespread in most parts of the world.

This paper highlights the molecular understanding of alcoholism, and may contribute to the therapeutic armamentarium of the physician in treating and preventing alcoholism.

“This paper summarizes research indicating that individuals carrying the ALDH2\*2 allele are protected between 66% (heterozygous ALDH2\*1/ ALDH2\*2) and 99% (homozygous ALDH2\*2/ ALDH2\*2) against alcoholism. These studies indicate that humans carrying the ADH1B\*2 (ADH-47His) gene are protected against alcoholism. These studies strongly suggest possible therapeutic avenues in the treatment of alcoholism. The paper contributes to a better understanding of the genetic polymorphisms leading to alcohol abuse, and this can be of great value.”

### Forum Summary

A summary paper on genetically determined mechanisms related to the metabolism of alcohol and acetaldehyde describes numerous ways that the metabolism, especially of acetaldehyde, may be modified, both in the periphery of the body and in the brain. Individuals with a mutation of the aldehyde dehydrogenase gene (the ALDH2\*2 allele), and certain other genetically determined enzymes, do not tolerate alcohol and are much less likely to become alcohol abusers. The authors state that their studies suggest possible therapeutic avenues in the treatment of alcoholism.

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

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## Alcohol drinking does not affect postoperative surgical site infection or anastomotic leakage

Research from the Department of Surgery, Bispebjerg Hospital, in Copenhagen, Denmark, states that alcohol abuse appears to increase postoperative complications, but clinical trials have reported conflicting results. The objective of their systematic review and meta-analysis is to clarify how alcohol drinking affects postoperative surgical site infection and anastomotic leakage and to determine the impact of perioperative alcohol intervention.

Meta analyses were performed on observational studies assessing surgical site infection and anastomotic leakage for alcohol drinkers and randomized controlled trials (RCTs) studying perioperative alcohol interventions.

Fifteen observational studies and 2 RCTs were identified from the MEDLINE, EMBASE, and CENTRAL databases. Meta-analyses were performed for alcohol drinkers vs nondrinkers and moderate drinkers ( $\leq 2$  U/day), respectively. No difference between alcohol drinkers and nondrinkers was found. When drinkers and moderate drinkers were compared, a significantly higher incidence of surgical site infection and anastomotic leakage was found in unadjusted studies. In the meta-analysis of studies adjusting for smoking and age, alcohol drinking did not significantly affect surgical site infection and anastomotic leakage. The RCTs did not show any effect of perioperative alcohol abstinence or pharmacological withdrawal treatment on outcome. The authors conclude that alcohol drinking is not an independent risk factor for surgical site infection and anastomotic leakage. Interventions which aim to make patients quit alcohol or treat withdrawal symptoms do not seem to affect the surgical outcomes of interest.

Source: Drinking does not Affect Postoperative Surgical Site Infection or Anastomotic Leakage: A Systematic Review and Meta-analysis. Shabanzadeh DM, Sørensen LT. *Journal of Gastrointestinal Surgery*. 07/12/2013.



## Alcohol consumption, types of alcohol, and Parkinson's Disease

A US study states that the epidemiologic evidence on alcohol consumption and Parkinson's disease (PD) is equivocal and depends on dose and beverage type. The authors prospectively examined total alcohol consumption and consumption of specific types of alcoholic beverage in relation to future risk of PD. They found that moderate beer consumption to be protective, wine borderline and spirits not protective.

The study comprised 306,895 participants (180,235 male and 126,660 female) ages 50–71 years in 1995–1996 from the NIH-AARP Diet and Health Study. Consumption of alcoholic beverages in the past 12 months was assessed in 1995–1996. Multivariate odds ratios (OR) and 95% confidence intervals (CI) were obtained from logistic regression models.

A total of 1,113 PD cases diagnosed between 2000 and 2006 were included in the analysis. Total alcohol consumption was not associated with PD. However, the association differed by types of alcoholic beverages. Compared with non-beer drinkers, the multivariate ORs for beer drinkers were 0.79 for less

than 1 drink/day, 0.73 for 1–1.99 drinks/day, and 0.86 for 1 or more/day. For liquor consumption, a monotonic increase in PD risk was suggested: ORs were 1.06, .22, and 1.35 for less than 1, 1–1.99, and  $\geq 2$  drinks/day, respectively. Additional analyses among exclusive drinkers of one specific type of alcoholic beverage supported the robustness of these findings. The results for wine consumption were less clear, although a borderline lower PD risk was observed when comparing wine drinkers of 1–1.99 drinks/day with non drinkers.

The study findings suggest that beer and liquor consumption may have opposite associations with PD: low to moderate beer consumption with lower PD risk and greater liquor consumption with higher risk. They suggest that these findings and potential underlying mechanisms warrant further investigations.

Source: Alcohol Consumption, Types of Alcohol, and Parkinson's Disease. Rui Liu, Xuguang Guo, Yikyung Park, Jian Wang, Xuemei Huang, Albert Hollenbeck, Aaron Blair, Honglei Chen. PLOS ONE Open access.

## Lifestyle factors and inflammation: associations by body mass index

Authors of a paper examining the associations of lifestyle factors and inflammation state that 'low-grade chronic inflammation has been associated with risk of several chronic diseases, including cardiovascular disease and several cancers, although its exact role in the etiology of these diseases is uncertain. It is therefore important to understand how one may reduce inflammation, as it is possible that reducing inflammation may represent a feasible disease-prevention strategy. Several modifiable factors have been associated with reduced inflammation, including: increased dietary fibre intake, decreased saturated fat intake, increased physical activity, not smoking, moderate alcohol consumption and use of certain supplements and drugs: glucosamine, chondroitin, fish oil, vitamin E, statins, and aspirin'.

To study whether these associations differ by body mass index (BMI), the study used data on 9,895 adults included in the 1999–2004 cycles of the National Health and Nutrition Examination Survey (NHANES).

Survey-weighted linear regression was used to evaluate the associations between modifiable factors and serum high-sensitivity C-reactive protein (hsCRP) concentrations across the following groups: underweight/normal weight (BMI < 25 kg/m<sup>2</sup>), overweight (25 < BMI < 30 kg/m<sup>2</sup>) and obese (BMI  $\geq 30$  kg/m<sup>2</sup>).

While several factors were significantly associated with decreased hsCRP among the normal weight or overweight groups (increased fiber intake, lower saturated fat intake, physical activity, not smoking, and use of chondroitin, fish oil and statins), only increasing dietary fiber intake and moderate alcohol consumption were associated with reduced hsCRP among the obese. These results suggest that posited anti-inflammatory drugs and behaviours may be less strongly associated with inflammation among the obese than among lower weight persons.

Source: Lifestyle factors and inflammation: associations by body mass index. Kantor ED, Lampe JW, Kratz M, White E. PLOS ONE Open access.

## Drinking beer improves arterial function, Greek study finds

Researchers at the Harohopio University in Athens conducted a study to determine the effect of beer consumption on CV risk. In order to explore the underlying mechanisms, they studied the acute effects of the constituents of beer (alcohol and antioxidants), on established predictors of CV risk: endothelial function, aortic stiffness, pressure wave reflections and aortic pressure.

In a randomised, single-blind, crossover study, 17 healthy, non-smoking, men (ages  $28.5 \pm 5.2$  y with body mass index  $24.4 \pm 2.5$  kg/m<sup>2</sup>) consumed on three separate occasions, at least 1 wk apart: 1. 400 mL of beer and 400 mL water, 2. 800 mL of dealcoholised beer (same amount of polyphenols as in the 400 mL of beer), and 3. 67 mL of vodka and 733 mL water (same amount of alcohol as in the 400 mL of beer).

Each time aortic stiffness (pulse wave velocity), pressure wave reflections, aortic and brachial pressure, and endothelial function were assessed at fast and 1 and 2 h postprandial.

Aortic stiffness was significantly and similarly reduced by all three interventions. However, endothelial

function was significantly improved only after beer consumption (average 1.33%, 95% confidence interval [CI] 0.15–2.53). Although wave reflections were significantly reduced by all three interventions (average of beer: 9.1%, dealcoholised beer: 2.8%, vodka 8.5%, the reduction was higher after beer consumption compared with dealcoholised beer. Pulse pressure amplification (i.e. brachial/aortic) was increased by all three test drinks.

The findings suggest both the alcohol and antioxidants in beer might be beneficial to heart function. The authors conclude that beer acutely improves parameters of arterial function and structure, in healthy non-smokers. This benefit seems to be mediated by the additive or synergistic effects of alcohol and antioxidants and, the researchers state, merits further investigation.

Source: *Acute effects of beer on endothelial function and hemodynamics: A single-blind, crossover study in healthy volunteers.* Kalliopi Karatzi, Victoria G. Rontoyanni, Athanase D. Protogerou, Aggeliki Georgoulia, Konstantinos Xenos, John Chrysou, Petros P. Sfikakis, Labros S. Sidossis. *Nutrition*, published on-line 2013.

## Consumption of some beverages, including beer and wine, may reduce the risk of kidney stones

A study published in the *Clinical Journal of the American Society of Nephrology* has found that certain beverages can increase a person's chance of developing kidney stones.

The research prospectively analysed the association between intake of several types of beverages and incidence of kidney stones in three large ongoing cohort studies. Information on consumption of beverages and development of kidney stones was collected by validated questionnaires.

The analysis involved 194,095 participants; over a median follow-up of more than 8 years, 4,462 incident cases occurred. There was a 23% higher risk of developing kidney stones in the highest category of consumption of sugar-sweetened cola compared with the lowest category (P for trend=0.02) and a 33% higher risk of developing kidney stones for sugar-sweetened noncola (P for trend=0.003); there

was a marginally significant higher risk of developing kidney stones for artificially sweetened noncola (P for trend=0.05). Also, there was an 18% higher risk for punch (P for trend=0.04) and reduced risks of 26% for caffeinated coffee (P for trend<0.001), 16% for decaffeinated coffee (P for trend=0.01), 11% for tea (P for trend=0.02), 31%–33% for wine (P for trend<0.005), 41% for beer (P for trend<0.001), and 12% for orange juice (P for trend=0.004).

The study concludes that consumption of sugar-sweetened soda and punch is associated with a higher risk of stone formation, whereas consumption of coffee, tea, beer, wine, and orange juice is associated with a lower risk.

Source: *Soda and Other Beverages and the Risk of Kidney Stones.* Pietro Manuel Ferraro, Eric N. Taylor, Giovanni Gambaro, Gary C. Curhan. *Clinical Journal of the American Society of Nephrology*, published online before print May 2013.

## The effect of drinking alcohol during pregnancy on balance ability in childhood

An open access article in the BMJ Online states that 'Alcohol consumption during pregnancy has been found to have adverse effects on several neurodevelopmental outcomes. However, previous observational studies of the effect of prenatal alcohol exposure on childhood balance ability, an important neurodevelopmental outcome, have failed to reach consensus'. The study investigated the association of prenatal alcohol exposure with balance in 10-year-old children.

Participants included 6,915 children from the Avon Longitudinal Study of Parents and Children who had a balance assessment at age 10 and had data on maternal alcohol consumption. 3 composite balance scores were analysed: dynamic balance (beam-walking), static balance eyes open, static balance eyes closed (heel-to-toe balance on a beam and standing on one leg, eyes open or closed).

Most mothers (95.5%) consumed no-to-moderate amounts (3–7 glasses/week) of alcohol during pregnancy. Higher total-alcohol consumption was associated with maternal-social advantage, whereas binge drinking ( $\geq 4$  units/day) and abstinence were associated with maternal social disadvantage. No evidence was found of an adverse effect of maternal-alcohol consumption on childhood balance. Higher maternal-alcohol use during pregnancy was

generally associated with better offspring outcomes, with some specific effects appearing strong (static balance eyes open and moderate total alcohol exposure at 18 weeks, adjusted OR 1.23 (95% CI 1.01 to 1.49); static balance eyes closed and moderate total alcohol exposure at 18 weeks, adjusted OR 1.25 (95% CI 1.06 to 1.48). Similar results were found for both paternal and postnatal maternal alcohol exposure. A Mendelian-randomization approach was used to estimate the association between maternal genotype and offspring balance using the non-synonymous variant rs1229984\*A (ADH1B) to proxy for lower maternal alcohol consumption; no strong associations were found between this genotype/proxy and offspring balance.

The authors conclude that no evidence was found to indicate that moderate maternal alcohol consumption in this population sample had an adverse effect on offspring balance at age 10. An apparent beneficial effect of higher total maternal alcohol consumption on offspring balance appeared likely to reflect residual confounding.

Source: Prenatal alcohol exposure and childhood balance ability: findings from a UK birth cohort study. Rachel Humphriss, Amanda Hall, Margaret May, Luisa Zuccolo, John Macleod. *BMJ Open* 2013;3:e002718 doi:10.1136/bmjopen-2013-002718.

## Effects of a persistent binge drinking pattern of alcohol consumption in young people

The objective of this study was to examine brain activity related to visual attention processes in youths who had maintained a binge drinking (BD) pattern of alcohol consumption for  $>2$  years.

The participants were 57 university students (26 binge drinkers: BDs) with no personal or family history of alcoholism or psychopathological disorders in first-degree relatives. Event-related potentials (ERP), the measured brain responses, were recorded while participants performed a visual oddball task (twice within a 2-year interval). The latency and amplitude of the P3b component of the ERPs were analysed. (improbable events will elicit a P3b, and the less probable the event, the larger the P3b).

The P3b amplitude was larger in young BDs than in aged-matched controls at both evaluation times, and the difference was more pronounced after 2 years of maintenance of a BD pattern of consumption. The

larger P3b amplitude was associated with an earlier onset of regular drinking and with a greater quantity and intensity of consumption.

The authors state that their findings suggest that young BDs exhibit anomalies in neural activity involved in attentional/working memory processes, which increase after 2 years of BD. This anomalous neural activity may reflect underlying dysfunctions in neurophysiological mechanisms as well as the recruitment of additional attentional/working memory resources to enable the binge drinkers to perform the task adequately.

Source: Effects of a Persistent Binge Drinking Pattern of Alcohol Consumption in Young People: A Follow-Up Study Using Event-Related Potentials. Eduardo López-Caneda, Fernando Cadaveira, Alberto Crego, Sonia Doallo, Montserrat Corral, Ana Gómez-Suárez and Socorro Rodríguez Holguín. *Alcohol and Alcoholism*. Published early online 21 May 2013.

## Changes in alcohol intake modify levels of fibrinogen, an important risk factor for coronary heart disease

Okwuosa TM, Klein O, Chan C, Schreiner P, Liu K, Green D. Long-term change in alcohol-consumption status and variations in fibrinogen levels: the coronary artery risk development in young adults (CARDIA) study. *BMJ Open* 2013;3:e002944. doi:10.1136/bmjopen-2013-002944

### Authors' Abstract

**Objective:** To examine long-term associations between change in alcohol-consumption status and cessation of alcohol use, and fibrinogen levels in a large, young, biracial cohort.

**Design:** Analysis of covariance models were used to analyse participants within the Coronary Artery Risk Development in Young Adults Study (CARDIA) cohort who had fibrinogen and alcohol use data at year 7 (1992–1993; ages 25–37) and year 20 examinations.

**Setting:** 4 urban US cities.

**Patients:** 2520 men and women within the CARDIA cohort.

**Main outcome measures:** 13-year changes in alcohol use related to changes in fibrinogen.

**Results:** Over 13 years, mean fibrinogen increased by 71 vs 70 mg/dL ( $p=NS$ ) in black men (BM) versus white men (WM), and 78 vs 68 mg/dL ( $p<0.05$ ) in black women (BW) versus white women (WW), respectively. Compared with never-drinkers, there were smaller longitudinal increases in fibrinogen for BM, BW and WW (but a larger increase in WM) who became or stayed drinkers, after multivariable adjustment. For BM, WM and WW, fibrinogen increased the most among persons who quit drinking over 13 years ( $p<0.001$  for WM (fibrinogen increase=86.5 (7.1) (mean (SE)), compared with never-drinkers (fibrinogen increase=53.1 (5.4)).

**Conclusions:** In this young cohort, compared with the participants who never drank, those who became/stayed drinkers had smaller increases, while those who quit drinking had the highest increase in fibrinogen over 13 years of follow-up. The results provide a novel insight into the mechanism for the established protective effect of moderate alcohol intake on cardiovascular disease outcomes.

### Forum Comments

This could be an important paper as it reveals the results of changes in alcohol consumption in a well-defined cohort over 13 years. As has been suggested by limited previous studies, people who quit drinking tend to have poorer health outcomes subsequently. This study suggests that an increase in fibrinogen may

be one factor leading to increased cardiovascular risk among people who stop alcohol consumption.

However, as Forum reviewer Ellison and others point out, as with other observational research, the reason that some subjects stopped drinking is not known. In the present study, subjects who quit drinking were more likely to have high blood pressure or diabetes at follow up. In an attempt to control for this, baseline and final assessments of these risk factors were adjusted for in the multivariable analyses.

Further, recorded alcohol intake only at baseline and 13 years later were used in the analyses, and no data are included about alcohol intake at other examinations of this cohort between these two points. Forum reviewer Puddey states: "The authors claim that the particularly novel aspect of their study relates to being able to ascertain changes in fibrinogen in relation to many years of alcohol use or abstinence. How can they be certain, however, that any effects of alcohol on fibrinogen seen at follow up related only to alcohol intake in those who have continued to drink or just initiated alcohol intake? The lack of repeatedly assessed data on alcohol consumption throughout the follow-up period makes it difficult to know if the data at both ends of the period reflect usual or chronic alcohol consumption." In addition, important determinants of cardiovascular risk such as the pattern of drinking (regular moderate, binge) as well as the type of beverage consumed are not presented in the paper.

The authors of the paper conclude: "Overall, persons who continued to use alcohol and those who initiated alcohol consumption during the 13 years of follow-up had smaller changes in fibrinogen levels relative to those who never consumed alcohol." If other factors are controlled for, this finding could be an important message, and supports limited data from other cohort studies indicating that moderate drinkers who stop drinking are subsequently at higher risk of cardiovascular disease.

Specific comments by Forum reviewers: Forum reviewer Puddey commented: "The results of this study provide equivocal support for the hypothesis that a long-term effect of alcohol to modulate fibrinogen levels may represent the underlying

mechanism for the protective effect of alcohol on cardiovascular disease outcomes. This equivocation is because of the observation of inconsistent outcomes across race/sex strata within their cohort. In particular, in white men fibrinogen increased more in those who became or stayed drinkers and increased least amongst those who never drank alcohol over a 13 year period of observation."

**Puddey continues:** "An effect of alcohol to reduce fibrinogen is held to reflect an effect of alcohol to reduce platelet aggregation and vascular thrombosis. However fibrinogen levels are also elevated in inflammatory states and as the authors observe, anti-inflammatory effects of alcohol are now well described. Furthermore, interpretation of any influence of alcohol on fibrinogen as overall beneficial without measuring any other markers of coagulation and fibrinolysis is also fraught. In this respect our group (Dimmitt SB, Rakic V, Puddey IB, et al. The effects of alcohol on coagulation and fibrinolytic factors: a controlled trial. *Blood Coagul Fibrinolysis* 1998;9:39–45) have previously shown that although alcohol directly resulted in a substantial reduction in plasma fibrinogen, it also led to a concomitant increase in factor VII and a relatively greater increase in PAI-1 than tPA – changes which may be interpreted as prothrombotic."

Forum member Skovenborg stated: "I agree with other reviewers that there is concern about certain aspects of this study — especially the missing information about reasons for quitting, the analysis of alcohol consumption as a dichotomous variable, and the disturbing, unexpected and unexplained difference in the association of alcohol drinking and fibrinogen levels found in white men. Never-the-less the study opens a window of information about long-term alcohol consumption (in the moderate range) on fibrinogen, a co-factor for platelet aggregation and a major determinant of blood viscosity and atherogenesis in a younger healthy population with limited risks of confounding."

**Skovenborg continues:** "The differences in fibrinogen levels among the 4 categories (continued non-drinker, became drinker, stayed drinker, quit drinking) are small (in the magnitude of 10 – 30 mg/dl). In a study of risk factors and 10-year risk for cardiovascular disease among 6,371 participants in NHANES III aged 40 to 79 years, the fibrinogen levels associated with low 10-year risk was 299.6 mg/dl, intermediate risk: 306.9 mg/dl and high risk 340.9 mg/dl (Park CS et al. Relation Between C-Reactive Protein, Homocysteine Levels, Fibrinogen, and Lipoprotein Levels and Leukocyte and Platelet Counts, and 10-Year Risk for Cardiovascular Disease Among Healthy Adults in the USA. *Am J Cardiol* 2010;105:1284 –1288). Hence, at least some effects could be expected with the changes observed in the present study. In a large meta-analysis of plasma fibrinogen level and the risk of cardiovascular disease, the age- and sex-adjusted hazard ratio per 100 mg/dl increase in usual fibrinogen level for CHD was 2.42 (Fibrinogen Studies Collaboration. Plasma Fibrinogen Level and the Risk of Major Cardiovascular Diseases and Nonvascular Mortality. *JAMA*. 2005;294:1799-1809)." Before concluding that fibrinogen is the key factor, however, potential changes in other clotting factors associated with changes in alcohol consumption should be taken into account.

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

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## Early arthritis associated with reduced consumption of alcohol

Patients who have early arthritis consume less alcohol than controls, regardless of the type of arthritis, according to a new study published online in the journal *Rheumatology*. In rheumatoid arthritis (RA) specifically, the inverse association between alcohol and disease was found to be greater in men than it was in women.

Studies examining alcohol consumption and RA have so far had conflicting results. In this new study, Annekoos L. Huidekoper, Diane van der Woude, and colleagues investigated whether there is an association between alcohol consumption and arthritis in general, and with RA in particular.

992 patients who had had arthritis and different diagnoses including RA, osteoarthritis, reactive arthritis, spondylarthritis, and psoriatic arthritis for two years or less, as well as 5,868 controls, were asked about their alcohol consumption. Those interviewed by a nurse were asked for an exact number of alcoholic drinks consumed per week, while those who filled in the questionnaire were asked whether they consumed alcohol, and if they did, how many units per week.

The research identified an inverse relationship between drinking alcohol and the presence of all forms of arthritis. While 83% of the controls reported drinking alcohol, 53-68% of arthritis patients reported consuming alcohol. The lowest figure came from respondents with ACPA-positive RA, while the highest figure came from patients with psoriatic arthritis. In patients with RA, the inverse association between

alcohol and the disease was greater in men than it was in women, although this difference was not seen in the patients with other types of arthritis. However, the study did not find any significant dose-response relationship, nor did they detect an association between alcohol and the rate of joint destruction when examined over seven years.

Diane van der Woude, one of the lead authors of the study, commented: "Our findings can be interpreted in several ways. One hypothesis might be that alcohol may suppress both the innate and adaptive immune system leading to a decrease of joint inflammation, as has been suggested by some previous studies.

"Another possible explanation for our findings is that people with arthritis drink less alcohol due to their illness. This explanation seems probable since we observed a relationship between alcohol and the level of inflammation."

While the study does have limitations, such as the risk of interviewer bias and recall bias, it is, to the authors' knowledge, the first to include not just patients with RA, but also patients with other types of arthritis, and the finding that alcohol is also inversely associated with these other types of the disease sheds new light on the association between alcohol consumption and RA. It also questions whether the effect of alcohol on the underlying pathophysiology is specific to RA.

Source: 'Patients with early arthritis consume less alcohol than controls, regardless of the type of arthritis' by Annekoos L. Huidekoper et al., *Rheumatology*, DOI: 10.1093/rheumatology/ket212.

## Trends in socioeconomic inequalities in adolescent alcohol use in Germany

A study published in the *International Journal of Public Health* examined the socioeconomic differences in adolescent alcohol use in Germany as well as their changes between 1994 and 2006.

Data were obtained from the "Health Behaviour in School-aged Children" study conducted in North Rhine-Westphalia, Germany in 1994, 1998, 2002 and 2006. The analysis included 5,074 15-year-old students. Prevalence and trends were analysed for family affluence and educational track separately.

An increase in weekly alcohol use between 1994 and 2002 was followed by a strong decrease from 2002 to 2006. Family affluence only had a weak effect on weekly drinking with a tendency for lower-affluent

students reporting less alcohol use. Educational track showed almost no relationship with weekly alcohol use. Trend analyses within the subgroups revealed that the overall trend in alcohol use was similar in all socioeconomic and educational groups.

The authors state that socioeconomic patterns in drinking behaviour are not yet developed in 15-year-old adolescents. Adolescence could therefore be an important time frame for tackling inequalities in alcohol use later in life.

Source: Trends in socioeconomic inequalities in adolescent alcohol use in Germany between 1994 and 2006. Matthias Richter, Emmanuel Kuntsche, Margaretha de Looze, Timo-Kolja Pfoertner. *International Journal of Public Health* July 2013.

## Voluntary agreements between government and business - a scoping review of the literature with specific reference to the Public Health Responsibility Deal

A scoping review was conducted to synthesise the findings of evaluations of voluntary agreements between business and government. It aimed to summarise the types of agreements that exist, how they work in practice, the conditions for their success and how they had been evaluated.

Voluntary agreements were included in the study if they involved a transparent signing-up process and where businesses agreed to carry out specific actions or to achieve specific outcomes. Studies of any design published in English were included. 47 studies were identified.

The authors found that voluntary agreements may help to improve relationships between government and business, and can help both parties agree on target-setting and data-sharing. Governments may also use the experience to help develop subsequent legislation. For voluntary agreements to be successful, targets should be ambitious and clearly defined, with

robust independent monitoring. Public knowledge of agreements can help encourage participation and ensure compliance.

Conclusions from the study are as follows: If properly implemented and monitored, voluntary agreements can be an effective policy approach, though there is little evidence on whether they are more effective than compulsory approaches. The authors state that some of the most effective voluntary agreements include substantial disincentives for non-participation and sanctions for non-compliance. Many countries are moving towards these more formal approaches to voluntary agreements.

Source: *Voluntary agreements between government and business - a scoping review of the literature with specific reference to the Public Health Responsibility Deal*, Bryden A; Petticrew M; Mays N; Eastmure E; Knai C, *Health Policy*, Vol 110, No 2-3, 2013, pp186-197.

## Hospital admissions in Queensland for alcohol-related conditions following the increase in 'alcopops' tax

In response to concerns about the health consequences of high-risk drinking by young people, the Australian Government increased the tax on pre-mixed alcoholic beverages ('alcopops') favoured by this demographic. A recent study measured changes in admissions for alcohol-related harm to health throughout Queensland, before and after the tax increase in April 2008.

Data from the Queensland Trauma Register, Hospitals Admitted Patients Data Collection, and the Emergency Department Information System was used to calculate alcohol-related admission rates per 100,000 people, for 15-29 year-olds. The authors analysed data over 3 years (April 2006 - April 2009). This covered 2 years before, and 1 year after, the tax increase. The analysis included both mental

and behavioural consequences (via F10 codes), and intentional/unintentional injuries (S and T codes).

Results indicated that there was no decrease in alcohol-related admissions in 15-29 year-olds. Similar results were found for males and females, as well as definitions of alcohol-related harms that were narrow (F10 codes only) and broad (F10, S and T codes).

The authors conclude that the increased tax on 'alcopops' was not associated with any reduction in hospital admissions for alcohol-related harms in Queensland for 15-29 year-olds

Source: *A time series analysis of presentations to Queensland health facilities for alcohol-related conditions, following the increase in 'alcopops' tax*. Kisely S; Crowe E; Lawrence D; White A; Connor J. *Australasian Psychiatry*. Published early online 13 May 2013.

## The impact of cutting alcohol duties on drinking patterns in Hong Kong

In an effort to promote Hong Kong as a global wine hub, the government eliminated duties on wine and beer in 2008. The changes in alcohol consumption patterns are examined.

The researchers carried out anonymous, telephone surveys on a random sample of Chinese male and female residents aged 18-70 in 2011 (n = 4800) and 2012 (n = 1001). These data were compared with those of a 2006 (n = 9896) baseline survey conducted before the excise tax elimination.

Prevalence of those ever drinking alcohol significantly increased from the 2006 baseline level of 66.6% to 82.0% in 2011 and to 85.2% in 2012. 10.2% of ever drinkers within the 2012 sample reported consuming alcohol for the first time in or after 2008. Younger, more

educated or more affluent parts of the population are more likely to be ever drinkers. Unexpectedly, prevalence of binge drinking in the population decreased from the 2006 baseline of 9.0% to 7.1% in 2011 and to 7.3% in 2012.

The study concludes that the quantity of alcohol reportedly consumed by individuals did not change, while alcohol abuse and alcohol dependence levels decreased. However, those with lower educational achievement and the unemployed had a higher likelihood of binge drinking.

Source: The impact of cutting alcohol duties on drinking patterns in Hong Kong. Chung VC, Yip BH, Griffiths SM, Yu EL, Kim JH, Tam WW, Wong AH, Chan IW, Lau JT. *Alcohol and Alcoholism*. advanced access online.

## Early childhood personality may predict teen alcohol abuse

New research suggests adolescent alcohol use has roots in early childhood as children develop personality characteristics and life experiences which can lead to early alcohol problems.

Researchers evaluated measures of temperament among children six months through to five years of age and found that childhood temperament prior to age five predicts adolescent alcohol use and problems at age 15.5 years.

The early experiences were influential even after controlling for socio-demographic factors and parental alcohol problems.

Danielle Dick, Ph.D., associate professor of psychiatry, psychology and human and molecular genetics at Virginia Commonwealth University and her colleagues used data from the Avon Longitudinal Study of Parents and Children (ALSPAC), a large epidemiological sample of pregnant women with delivery dates between April 1991 and December 1992. The children (6,504 boys, 6,143 girls) were followed longitudinally. Temperamental characteristics were assessed at six time points from six to 69 months of age. Alcohol use and problems were assessed at age 15.5 years.

“Some of the most interesting findings to emerge from this study are that, one, we can identify childhood temperamental styles that emerge prior to age five that predict alcohol use and problems in mid-adolescence,” said Dick.

“The early childhood temperamental styles that predict alcohol use are very different and largely uncorrelated – that both kids who show consistent emotional and behavioral problems early on are at elevated risk and kids who are consistently sociable at a very early age are also at risk. This indicates very different pathways to alcohol involvement/patterns, that emerge early on, which has important implications for prevention efforts.”

Interestingly, the association between sociability and alcohol use/problems was more significant than the association found between emotional and conduct difficulties and later alcohol problems, said Dick.

Adolescent Alcohol Use is Predicted by Childhood Temperament Factors Before Age 5, with Mediation Through Personality and Peers. Danielle M. Dick, Fazil Aliev, Shawn J. Latendresse, Matt Hickman, Jon Heron, John Macleod, Carol Joinson, Barbara Maughan, Glyn Lewis, Kenneth S. Kendler. *Alcoholism: Clinical and Experimental research*, published online. 10 Jul 2013.

[onlinelibrary.wiley.com/doi/10.1111/acer.12206/full](http://onlinelibrary.wiley.com/doi/10.1111/acer.12206/full)



## Impulsive teens at risk for drinking problems

A UK study has confirmed a link between impulsive behaviours in young people and the decision to drink heavily at an early age. Previous research has suggested that impulsive behaviour is linked with adolescent drinking, but it is unclear whether young people who are impulsive tend to drink more, or whether drinking while the brain is still developing harms the brain, leading to the progression of impulsive behaviors.

University of Liverpool researchers believe targeting personality traits, such as impulsivity, could potentially be a successful intervention in preventing adolescent drinking from developing into problems with alcohol in later life.

For the research, the team used computer tests to measure inhibitory control (the ability to delay gratification) and risk-taking. More than 280 young people who were aged 12 or 13 at the beginning of the study were followed. The computer tests were repeated every six months over the two years of the study.

Results showed that those participants who were more impulsive in the tests went on to drink more heavily or have problems with alcohol at a later time. The study did not, however, show that alcohol consumption led to increased impulsive behavior on the computer tests. This suggests that there is a link between impulsivity and adolescent drinking, but that alcohol may not necessarily lead to increased impulsive behavior in the short term.

Professor Matt Field, from the University's Institute of Psychology Health and Society, explains: "Young people in the UK are starting to drink alcohol at a younger age than in the past, and much of this reflects broad social trends. There are, however, significant differences in the age at which teenagers start to experiment with alcohol and the age at which they start drinking regularly".

Source: University of Liverpool

## Social norms marketing campaign to reduce alcohol consumption among 1st year students

An exploratory trial examined the feasibility of implementing a social norms marketing campaign to reduce student drinking in universities in Wales.

Fifty residence halls in 4 universities in Wales were randomly assigned to intervention or control arms. Web and paper surveys were distributed to students within these halls (n = 3800), assessing exposure/contamination, recall of and evaluative responses to intervention messages, perceived drinking norms and personal drinking behaviour.

A response rate of 15% (n = 554) was achieved, varying substantially between sites. Intervention posters were seen by 80% and 43% of students in intervention and control halls respectively, with most remaining materials seen by a minority in both groups. Intervention messages were rated as credible and relevant by just over half of students, though fewer felt they would influence their behaviour. Lighter drinkers were more likely to perceive messages as credible. No differences in perceived

norms were observed between intervention and control groups. Students reporting having seen intervention materials reported lower descriptive norms (perception of which behaviors are typically performed) and injunctive norms (perceptions of which behaviours are typically approved or disapproved) than those who did not.

The authors state that attention is needed to enhancing exposure, credibility and perceived relevance of intervention messages, particularly among heavier drinkers, before definitive evaluation can be recommended. A definitive evaluation would need to consider how it would achieve sufficient response rates, whilst hall-level cluster randomisation appears subject to a significant degree of contamination.

Source: An exploratory cluster randomised trial of a university halls of residence based social norms marketing campaign to reduce alcohol consumption among 1st year students. *Subst Abuse Treat Prev Policy*. 2013; 8: 15. Published online 2013 April 18.

## Empowering adolescents to control alcohol-associated risky situations

A paper from Israel describes and evaluates an innovative experiential project that aims to augment existing alcohol high school educational programmes.

Students of 11th grade classes, age 16-17 years, participated in a one-school-day programme which included: a lecture on alcohol related risks; an enacted scenario of violent behaviour related to alcohol use; meeting with a disabled person injured in an alcohol-associated road accident, and discussion of two video movies regarding consequences of excessive alcohol drinking. The students filled a pre intervention alcohol-related knowledge, attitude and practice questionnaire, a feedback questionnaire at the end of the one-day programme, and a 3-months post intervention questionnaire on their alcohol-related behaviours.

665 eleventh grade students participated in the project. The preintervention questionnaire revealed

adequate knowledge on alcohol-related risks by 65% of the students. The feedback questionnaire revealed that most students felt that the programme added to their knowledge and that it might change their alcohol use behaviour. The postintervention questionnaire revealed that 81% would not refrain from alcohol drinking following the project; however 47% reported consuming alcohol in moderation, and 24% specified decrease in the amount of alcoholic beverages.

The authors confirm that this experiential educational programme regarding negative outcomes of alcohol consumption resulted in reported alcohol-related behaviour change in a proportion of high school students.

Source: Empowering adolescents to control alcohol-associated risky situations. Hardoff D, Stoffman N, Ziv A. Arch Dis Child doi:10.1136/archdischild-2013-303994.

## Predicting steep escalations in alcohol use over the teenage years: Age-related variations in key social influences

In Australia, researchers have found that certain factors may predict an increased risk for steep escalations in alcohol use in young people during their teenage years. .

This study examined how family, peer and school factors are related to different trajectories of adolescent alcohol use at key developmental periods.

The study included over 800 students in Victoria. Latent Class Growth Analysis was used to identify trajectories based on five waves of data (from Grade 6 - age 12 to Grade 11 - age 17), with predictors at Grade 5, Grade 7, and Grade 9 included as covariates.

Alcohol use trajectories were based on self-reports of 30 day frequency of alcohol use. Predictors included sibling alcohol use, attachment to parents, parental supervision, parental attitudes favorable to adolescent alcohol use, peer alcohol use, and school commitment.

8.2% showed steep escalation in alcohol use. Relative to non-users, steep escalators were predicted by age-specific effects for low school commitment at Grade 7 ( $p = .031$ ) and parental attitudes at Grade 5 ( $p = .003$ ), and age-generalized effects for sibling alcohol use ( $ps = .001/.012/.033$  at Grade 5/7/9) and peer alcohol use ( $ps = .041/.001/.001$  at Grade 5/7/9). Poor parental supervision was associated with steep escalators at Grade 9 ( $p < .001$ ) but not the other grades. Attachment to parents was unrelated to alcohol trajectories.

Parental disapproval of alcohol use before transition to high school, low school commitment at transition to high school, and sibling and peer alcohol use during adolescence are associated with higher risk of steep escalations in alcohol use.

Source: Predicting Steep Escalations in Alcohol Use Over the Teenage Years: Age-Related Variations in Key Social Influences. Chan GC, Kelly AB, Toumbourou JW, Hemphill SA, Young RM, Haynes MA, Catalano RF. Arch Dis Child doi:10.1136/archdischild-2013-303994.

## Synopsis of healthy lifestyles across Europe compares status 2008/10

In June 2013, The European Food Information Council published an analysis of progress between the 2010 OECD 'Health at a Glance' report and the follow up report in 2012 (reported AIM Dec 2012).

According to the analysis '*Despite some disparities, great progress has been achieved in recent decades in the health of Europeans. With changing economic circumstances, it is particularly important that changes in health status and behaviours continue to be monitored.*'

The report summarises aspects most relevant to healthy lifestyles (see below).

### An analysis of lifestyle-related diseases in Europe assesses – where do we stand?

#### Cardiovascular disease

*Cardiovascular disease accounted for 36% of all deaths in Europe in 2010. France, Italy, Portugal and Spain have the lowest rate of death from heart disease, lending support to the hypothesis regarding the benefits of a Mediterranean-type diet. Countries with reductions*

*in death rates from heart disease (e.g. Netherlands, Denmark, UK, Ireland), or low mortality rates from stroke (France, Netherlands, Cyprus, Ireland), have achieved this through reductions in smoking and/or hypertension, as well as improvements in medical treatment.*

#### Cancer

*Cancer accounts for 28% of all deaths in Europe in 2010. Survival rates for different types of cancer have generally improved in most countries, however, these are lower for men, partly explained by greater risk factors and lower use of screening (detection). Among women, breast cancer is the most common, and prostate cancer has become the most common among men. The causes of prostate cancer are not well understood, but may be involve environmental and dietary factors.*

#### Diabetes

*Diabetes continues to show epidemic proportions; in 2011, over 6% of the population (30 million people) aged 20-79 years in EU Member States had diabetes. Type 1 diabetes (in which the body is unable to produce insulin)*

Health at a Glance: Europe 2010	Health at a Glance: Europe 2012
<ul style="list-style-type: none"> <li>Cardiovascular disease accounted for 40% of all deaths in 2008</li> </ul>	<ul style="list-style-type: none"> <li>Cardiovascular disease accounted for 36% of all deaths in 2010</li> </ul>
<ul style="list-style-type: none"> <li>Cancer accounted for 26% of all deaths in 2008</li> </ul>	<ul style="list-style-type: none"> <li>Cancer accounted for 28% of all deaths in 2010</li> </ul>
<ul style="list-style-type: none"> <li>More than 6% of adults aged 20-79 years, had diabetes in 2010.</li> </ul>	<ul style="list-style-type: none"> <li>More than 6% of adults aged 20-79 years, or 30 million people, had diabetes in 2011</li> </ul>
<ul style="list-style-type: none"> <li>50.1% of adults were overweight or obese.</li> <li>An average of 15.5% of adults were obese (2008 or nearest year available).</li> <li>Over 50% of adults were overweight or obese in 15 of the 27 EU countries.</li> </ul>	<ul style="list-style-type: none"> <li>52% of adults were overweight or obese.</li> <li>An average of 17% of adults were obese (2010 or nearest year available).</li> <li>Over 50% of adults were overweight or obese in 18 of the 27 EU countries.</li> </ul>
<b>Determinants of health</b>	
<ul style="list-style-type: none"> <li>24.2% of adults smoke daily in 2008 (or nearest year).</li> <li>Four of 27 EU countries had rates of less than 20% of the adult population smoking daily in 2008.</li> </ul>	<ul style="list-style-type: none"> <li>23% of adults smoke daily in 2010 (or nearest year).</li> <li>Seven of 27 EU countries had rates of less than 20% of the adult population smoking daily in 2010.</li> <li>Smoking rates appear to be increasing in the Czech Republic.</li> </ul>
<ul style="list-style-type: none"> <li>10.8 litres per capita alcohol in 2008</li> <li>Average change per capita across Europe:13% decrease 1980-2008</li> </ul>	<ul style="list-style-type: none"> <li>10.7 litres per capita alcohol in 2010.</li> <li>Average change per capita across Europe:15% decrease 1980-2010.</li> </ul>
<ul style="list-style-type: none"> <li>105kg of fruit, and 116kg of vegetables per capita supplied for consumption (2007).</li> </ul>	<ul style="list-style-type: none"> <li>63% of adults said they eat fruit and vegetables daily (2008).</li> <li>33% of girls and 25% of boys aged 15 years said they eat fruit at least once per day (2009/10).</li> </ul>

accounts for 10-15% of all cases and there is concern that it is developing at a younger age in children. Obesity and physical inactivity are two preventable risk factors of Type 2 diabetes (which arises from reduced insulin production or insulin insensitivity) and its associated complications. This is of major significance, since the prevalence of overweight and obesity continues to rise.

### **Overweight and obesity**

Fifty-two percent of the EU population are either overweight (Body Mass Index (BMI) 25-29.9 kg/m<sup>2</sup>) or obese (BMI ≥ 30 kg/m<sup>2</sup>). The prevalence of obesity varies from 8% in Romania and Switzerland, to 25% in UK and Hungary, with an average of 17% across the EU (15.5% in the previous report). Based on self-reported height and weight, from the Health Behaviour in School-aged Children (HBSC) 2009/2010 survey, one in six boys and one in ten girls aged 15 years are overweight or obese. Overweight youths are more likely to skip breakfast, are less physically active and spend more time watching television.

Interventions are focusing on the provision of healthy food options and encouraging physical activity. There is renewed interest in fat and sugar taxes, introduced in several countries, but it is too early to assess their effectiveness.

### **Food and drink consumption and physical activity**

#### **Alcohol consumption**

Alcohol consumption has also decreased since 1980 in many countries including France, Italy and Spain, but has risen in others (Cyprus, Finland, Ireland). In children aged 15 years, there has been some declines in self-reported 'drunkenness' (being drunk at least twice in their lifetime) since the late 1990s; however, rates have increased in Estonia, Hungary, Latvia, Lithuania and Poland.

#### **Fruit and vegetable consumption**

Fruit and vegetable consumption is an important marker of healthy eating, estimates in the 2012 report included survey data from adults. Across EU member states, about 63% of adults reported eating fruit and vegetables daily, in 2008. In the Health Behaviour in School-aged Children (HBSC) 2009/10 survey only about 33% of girls and 25% of boys aged 15 years reported eating fruit at least once per day (relatively unchanged since the last report). The results were similar for vegetable consumption.

### **Physical activity**

Only about 1 in 5 children (11 and 15 years old) reported activity levels that meet the advised daily 60 minutes of moderate-to-vigorous activity. Compared to the previous survey (2005-06), reported activity levels fell slightly for both boys and girls. Physical activity declined between the ages of 11 and 15 years, possibly reflecting a change from active "playing" to more structured activities and sports.

### **Into the future**

The report concludes that 'Across Europe there are rising trends in obesity and diabetes. Although in the last decades much has been achieved in population health, much work remains to be done in promoting healthy lifestyles. The report highlights that the impact of reduced public spending on health will need to be monitored'.

#### **References**

OECD (2012). Health at a Glance: Europe 2012, OECD Publishing: <http://dx.doi.org/10.1787/9789264183896-en>  
Currie C et al. (2012). HBSC study: international report from the 2009/2010 survey. Copenhagen: WHO Regional Office for Europe.

Source: Food Today no 87. [eufic.org](http://eufic.org)

## **TIPS Awards**

Health Communications, Inc. (HCI), the providers of the TIPS (Training for Intervention Procedures) Program, awarded the 2013 TIPS Award of Excellence to five (5) corporations and (5) higher education institutions last month. According to Mr Chafetz, President and CEO of HCI, "The recipients of this award have repeatedly demonstrated their commitment to promoting responsible consumption. They often go above and beyond the standard TIPS program when it comes to preventing the misuse of alcohol." The recipients of the award were: University Commercial; Colgate University; Disneyland Resort; The College of William & Mary; Food City; Ferris State University; Greenleaf Hospitality Group; Hamilton College Wegmans Food Markets, Inc.; Hampden-Sydney College; Xanterra Parks & Resorts, Inc.

[gettips.com/home/news/press/index.shtml](http://gettips.com/home/news/press/index.shtml)

## US study - Types of alcohol experience from childhood to adolescence

Researchers from the University of Pittsburgh collected data from children in one Pennsylvania county each year from ages 8 and a half through 18. They examined the development of alcohol involvement of 452 children. The ages at which children first sipped or tasted alcohol, drank, had three or more drinks in a row, had five or more drinks in a row, were drunk, or had alcohol problems were recorded. The researchers state that sipping and three or more drinks per occasion have been understudied to date.

From age 8.5 to 12.5 years, there were two latent classes: abstainers and sippers. The percentage of sippers increased to 67% by age 12.5 years. From ages 13.0 to 18.0, the research identified three latent classes: abstainers, sippers/light drinkers, and drinkers with drunkenness. At ages 13.5–15.5 years, drinkers in the latter class reported drunkenness with just three to four drinks per occasion. By age 18 years, sippers/light drinkers comprised 55% of the sample and drinkers with drunkenness comprised 38%.

John Donovan, associate professor of psychiatry and epidemiology at the University of Pittsburgh said that other research has identified a link between

early-onset drinking and associated behaviours such as binge drinking, marijuana use, delinquency, precocious sexual behaviour, drinking and driving in adolescence, and substance use disorder.

The study also highlighted racial differences among the children's early drinking habits. For instance, only 18% of 8.5-year-old Black children sipped alcohol compared with 44% of White children. And at age 11, 36 percent of Black children were light drinkers compared with 57 percent of White children.

*"Some researchers attribute this to several factors, including stronger parental disapproval of teen drinking in African-American families, the lower response of African-American teens to peer pressure, and the greater influence of religiosity in African-American families,"* Donovan explained.

The authors conclude that childhood experience with alcohol was surprisingly widespread. Sipping or tasting alcohol was common by age 12 years. A quarter of the sample drank before age 15 years.

Source: Types of Alcohol Use Experience From Childhood Through Adolescence. John E. Donovan, Donovan JE, Molina BSG. *Journal of Adolescent Health*, published online 11 June 2013.

## Anti-alcohol policies in schools are more effective if students think they are enforced

School anti-alcohol policies are more effective when students think they are being enforced, researchers at the University of Washington have found. Students' perceptions of the policies' enforcement are more important than the details of the policies.

Researchers studied school anti-alcohol policies in Washington state and Australia, and how effective they were in deterring eighth and ninth graders from drinking. Students were more likely to drink on campus if they felt the school did not enforce its anti-alcohol policies, even if the school had a suspension or expulsion policy.

If students believed school officials would enforce the policy, they were less likely to drink, even if the policy required milder sanctions, such as counseling. *"Whatever your school policy is, lax enforcement is related to more drinking,"* lead researcher Richard Catalano.

The study also found students were less likely to binge drink if they received an abstinence alcohol

message or a harm minimization message, and if they believed teachers would talk to them about alcohol's dangers.

Catalano said harsh punishment for drinking at school can have negative consequences, such as causing students to feel disconnected from school. The students may end up drinking even more. *"What we've seen in other studies from this sample is suspension policies actually worsen the behavior problem,"* he noted. *"What that says to me is, although you want policies and you want enforcement of policies, there are other ways of responding than suspension, expulsion and calling the police, such as getting a student to talk to a teacher about how alcohol might be harmful, or a session with the school counselor."*

Source: The impact of school alcohol policy on student drinking Tracy J. Evans-Whipp, Stephanie M. Plenty, Richard F. Catalano, Todd I. Herrenkohl and John W. Toumbourou. *Health Education Research*, published online June 13.

## UK government response to the alcohol strategy consultation

Minister of State at the Home Office, Jeremy Browne, made a statement in the House of Commons on Wednesday 17 July on the Government's response to the alcohol strategy consultation.

The response sets out action in three areas.

**1) targeted national action**, both from government in taking action on cheap alcohol, and the alcohol industry in strengthening voluntary commitments to reduce alcohol-related harms.

- Minimum unit pricing will remain a policy under consideration but will not be taken forward at this time as 'there is not yet enough concrete evidence that its introduction would be effective in reducing harms associated with problem drinking, without penalising people who drink responsibly'.
- Sales of alcohol below the level of alcohol duty plus value added tax will be banned. This will come in to effect in England and Wales no later than Spring 2014.
- Multi-buy promotions will not be banned as 'there remains a lack of convincing evidence that it would have a significant effect in reducing consumption'.
- There will be changes to make current mandatory licensing conditions more effective enabling tougher action on irresponsible promotions in pubs and clubs and promoting responsible drinking by raising customer awareness of availability of small servings.
- Browne stated that the decision not to proceed with introducing minimum unit pricing at this stage provides the alcohol industry with an opportunity to build on the current achievements of the Public Health Responsibility Deal and improve education to promote safer drinking; reducing the availability of high strength products that cause the most harm for problem drinkers; and responsible marketing and product placement.

### 2) Facilitating local action

- Browne acknowledged that targeted action by pubs and clubs has proved hugely effective in curbing irresponsible drinking, with Best Bar None, National Pubwatch, Purple Flag and Community Alcohol Partnerships demonstrating how much can be achieved by industry working in partnership at a local level. He stated that the government

will build on this by identifying a number of high harm local alcohol action areas and working with them to strengthen local partnerships; improve enforcement; and increase good practice of what works locally – including how areas can make the most of available health data as part of local decision making.

**3) Promoting growth**, by freeing up responsible business and community groups from unnecessary red tape, whilst maintaining the integrity of the licensing system.

- It will be quicker and easier for community groups and those wanting to sell small amounts of alcohol as part of a wider service to do so via the Community and Ancillary Sellers Notice.
- The annual limit for the number of Temporary Event Notices that can apply to a particular premises from 12 to 15 and will free up businesses that provide late night refreshment by removing the requirement to have a licence where there is no need for one.
- The requirement to renew personal licences every ten years will be abolished.
- There also plans to consult on whether to abolish personal licences altogether.

Responding to the UK Government's response to its Alcohol Strategy consultation, WSTA Chief Executive Miles Beale said:

"We welcome the Government's recognition of the industry's positive contribution to encouraging responsible drinking through the Public Health Responsibility Deal. It is only by working in partnership with industry that alcohol misuse in the UK can be tackled effectively. Pledges such as removing 1 billion units from the UK alcohol market are testament to this approach and to the industry's commitment."

"Now that the consultation is complete we look forward to working in partnership with Government and others, including the health community, on solutions that are proven and effective in tackling alcohol misuse - such as Community Alcohol Partnerships and better education and information campaigns."

## Underage teens buy alcohol online

A report by Alcohol Concern Cymru suggests children and young people in Wales are turning to online supermarket grocery services in order to buy alcohol.

The report, 'On your doorstep', highlights findings from a Wales-wide survey of minors aged between 14 and 17 years old. 15% of the respondents who had previously bought or attempted to buy alcohol for themselves or someone else, had successfully purchased alcohol via the internet, the majority of whom regarded it as "easy" to do so and an effective way to bypass age verification checks.

Alongside the survey, in March 2013 South Wales Police undertook a test purchase operation in Cardiff with 15 year-olds, to find out whether they were able to buy alcohol from major supermarket grocery websites.

It found that alcohol could be bought online from these sites with relative ease, by simply agreeing to the website terms and conditions, and being in possession of a debit card and email address. In 44% of the test cases, alcohol was then handed to the underage test purchasers in person without any requests for proof of age, despite published supermarket policies which state they will not deliver to under 18s.

[alcoholconcern.org.uk](http://alcoholconcern.org.uk)

## Alcohol identification & brief advice tracker

A simple system for the delivery, recording, and reporting of Alcohol Identification and Brief Advice (IBA), has been created. It is designed to help staff deliver the best IBA, and commissioners track implementation.

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

## Alcohol Health Network – reducing alcohol related ill-health in the workplace

Alcohol Health Network's AHN is a new social enterprise which aims to support employers and employees to reduce alcohol related ill-health across the workforce. It offers online self-assessment for staff, as well as policy advice, training, and resources for managers to raise alcohol awareness at work.

Since setting up as a social enterprise last year, the organization have worked with their academic advisory board to develop evidence-based web tools designed for the workplace setting.

So far over 25,000 employees have had access to the "e-drink-check", an online alcohol self-assessment tool. Two research studies have also been initiated involving 7 different organisations, investigating optimum ways to engage staff positively on this important issue.

[alcoholhealthnetwork.org.uk](http://alcoholhealthnetwork.org.uk)

## The WSTA Market Report for the 2nd quarter of 2013

The WSTA have released their Market Report for the 2nd quarter of 2013. The report contains data and analysis from Nielsen (off trade data), CGA Strategy (on trade data) and Wilson Drinks Report.

Some of the key findings the report highlights are:

- In the latest 12 weeks, off trade sales of wine declined by 3% in volume, whilst spirits remained steady with no rise or fall in volume sales.
- Champagne was down 2% in the off trade but remains the best performer in wine in the on trade with growth of 9% over the quarter.
- On trade sales of Liqueurs were up 18% in volume in the last quarter and 7% in the twelve months to March 2013.
- In the off trade, the cheaper end of the wine market continues to show significant declines in volume. All price bands over £5 have shown double-digit growth over the twelve weeks to May 2013.
- Inflation is down 2.4% in April 2013, whilst GDP has grown for 2 out of the last 3 quarters and is expected to keep growing.

[wsta.co.uk/images/stats/Q2%20Market%20Report%202013.pdf](http://wsta.co.uk/images/stats/Q2%20Market%20Report%202013.pdf)

## SHEU 'Young People into 2013' report

'Young People into 2013' is a "unique contemporary archive" of young people from the Schools Health Education Unit (SHEU). Each year, since 1977, SHEU has carried out healthy lifestyle surveys with young people; in 2012, this involved over 93,000 youngsters. The data have been collected from primary and secondary schools across the United Kingdom. The report is the 27th in the series.

The report examines young peoples lifestyle and concerns, looking specifically at food choices and weight control, health and safety issues including sleep patterns, the family home, money, exercise and sport and social and personal issues. Dr David Regis, Research Manager of the Schools Health Education Unit, says,

**"We can see lots of good news about alcohol, drugs and tobacco (all long-term downward trends)".**

However:

- 13% of boys aged 10 and 11, and ten per cent of girls the same age had an alcoholic drink within the past seven days.
- 1% of young boys said they had drunk alcohol on three of the past seven days
- Alcohol consumption increased as children grew older with more than a quarter of year ten pupils, (aged 14 and 15) having drunk alcohol at least once in the previous week.
- 17% of girls in year ten said they had been drunk on at least one occasion in the past seven days, with 4% claiming they had been intoxicated on more than one occasion during that period.
- 10% of 14-15 year-olds have mixed drugs and alcohol 'on the same occasion'
- 28% of 14-15 year-olds reported consuming at least one alcoholic drink in the 'last seven days'.

[sheu.org.uk/content/page/young-people-2013](http://sheu.org.uk/content/page/young-people-2013)

## New alcohol factsheets from Drinkaware

A new range of factsheets featuring expert information, tips and advice on a variety of topics have been added to the Drinkaware website including Acute Alcohol Poisoning, Alcohol & Men, Alcohol & Reproduction, Alcohol & Your Emotions, and Alcohol & Mental Health.

[resources.drinkaware.co.uk/factsheets](http://resources.drinkaware.co.uk/factsheets)

## New app helps young people affected by someone else's drinking

Alcohol Focus Scotland has developed a free smartphone app called YPAAD (Young People Affected by Another's Drinking) which gives advice and sources of support for teenagers who are affected by alcohol problems in their family.

Developed in consultation with young people, YPAAD is aimed at 11-16 year-olds who can use the app to explore how another person's drinking is affecting them, see and hear stories from other teenagers who are in a similar situation, and access a directory of support services.

A survey previously carried out by Alcohol Focus Scotland and Young Scot found:

- 47% of young people had been embarrassed by an adult's drunken behaviour.
- 3 in 10 young people have been worried about how much an adult they care about is drinking.
- 4 in 10 young people don't think adults are aware of how their drinking affects those around them.

The YPAAD app is an easy and discreet way for young people to access information and support they need to help them cope with someone else's drinking.

[alcohol-focus-scotland.org.uk/ypaad](http://alcohol-focus-scotland.org.uk/ypaad)

## The alcohol evidence matrix: evidence map of alcohol treatment

The Alcohol Matrix has been developed by Drug and Alcohol Findings for the Substance Misuse Skills Consortium as a resource to support practitioners, managers and commissioners to access the key research and evidence relevant to the delivery and organisation of alcohol treatment services in a range of contexts. Areas of interest across the contexts include: harm reduction, brief interventions, cross-cutting treatment issues, medical treatments, psychosocial therapies, and criminal justice work.

Within each cell of the matrix are the major historical and contemporary research landmarks, reviews offering a panoramic view, expert guidance, and an option to explore beyond these dozen or so selected documents.

[findings.org.uk/docs/amatrix.htm](http://findings.org.uk/docs/amatrix.htm)



## Wine Intelligence report on low alcohol wine

A Wine Intelligence report published at the beginning of July explores consumer attitudes to lower alcohol wine in eight countries – Canada, Denmark, France, Germany, Sweden, Switzerland, UK and the USA. The research scope was a mix of the established lower alcohol markets, and those for whom the category is still in its early stages.

The data shows there is a substantial minority – around 40% of wine consumers in the UK, Germany, Canada and the USA – who interested in buying lower alcohol wines of 9%-10.5% ABV. At alcohol levels of 5.5% and below, market penetration falls to 16% of consumers in the UK, and to 12% in Germany.

According to the report, this collapse in demand as alcohol levels fall exposes the complexity surrounding the lower alcohol wine category. Motivations for purchase appear to vary widely between consumers. Some opt for very low alcohol by volume (ABV) because in certain countries – like the UK – there is a particular tax break (at 5.5%), which makes the product much cheaper in comparison with standard wines. Others prefer to have slightly lower ABV than standard wine simply because they prefer the taste of a product that naturally has less alcohol in it, such as wines made with the Riesling or Moscato grape.

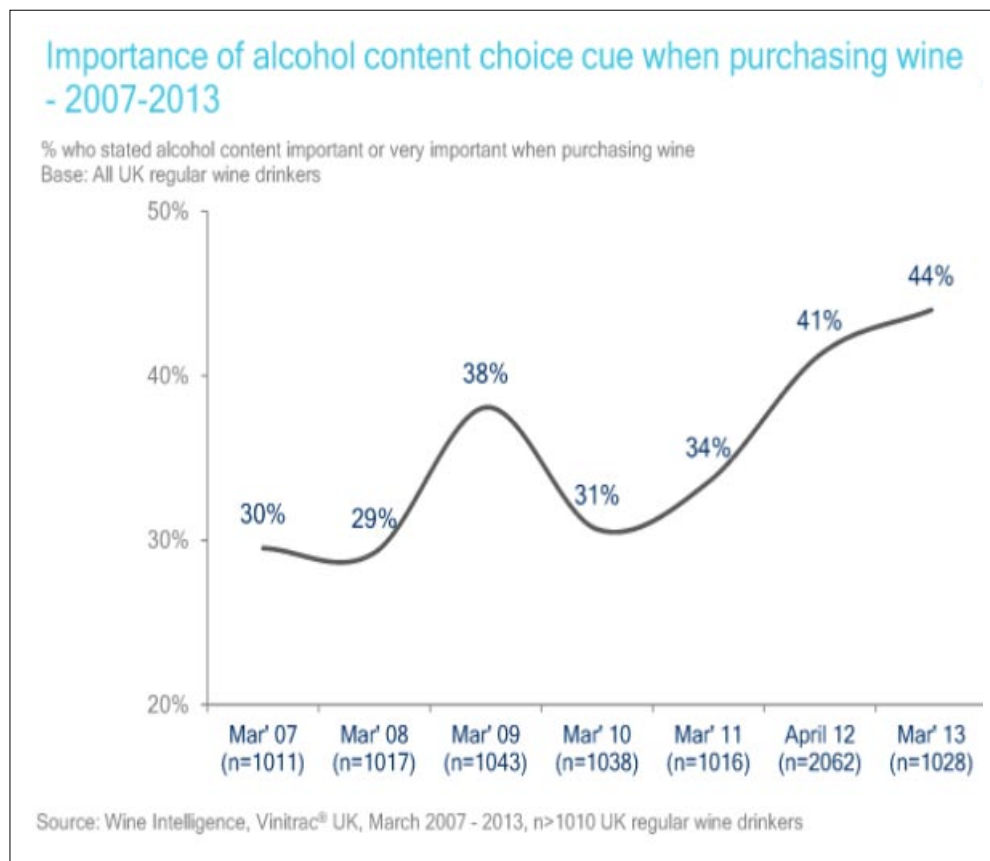
Other consumers say their interest in lower ABV wines comes from increasing concerns about their health, or drink-drive laws, or simply their preference to stay clear-headed and in control.

Wine Intelligence state that 'Through the aggressive introduction of sub-5.5% ABV wine products over the past 3 years, driven largely by supermarkets looking to maintain low priced products in their ranges in the face of duty increases, the UK has proved to be an interesting test-bed for the lower alcohol category. On the whole, however, consumers in the UK have been fairly cool towards the idea of lower alcohol wine. They may have tried a wine which has had its alcohol level lowered in a crude and unbalanced way; or may have tried a style of naturally lower alcohol wine that didn't suit their palate; or have seen that wines lower in alcohol, but which are not engineered to hit a tax-lowering price point, are in fact often more expensive than their full-fat brethren'.

However, the tracking data shows that the focus on alcohol levels in wine, both by government and at the store shelf, has had an impact on consumer attitudes. The 6 year historical trends for the perceived importance of alcohol level as a choice cue shows a significant growth, from 30% of consumers

saying alcohol levels were an important factor in their purchase decision in 2007, to 44%, so 4 million more British consumers think about ABV in their wine purchasing today compared with 2007. The report suggests that possibly 'the introduction of a more prominent low alcohol offer in a given market will lead to greater consumer consciousness of alcohol levels – and perhaps lay the groundwork for a more sustainable lower alcohol wine category in future'.

[wineintelligence.com/category/news/](http://wineintelligence.com/category/news/)



## UK Industry set to deliver on responsibility deal pledge to remove 1 billion units of alcohol from sale

Supermarkets and suppliers are on course to meet the government's target of removing one billion units of alcohol from sale within the next two years.

Figures released under the Department of Health's Responsibility Deal in July show thriving sales of both reduced alcohol beer and wine. These are the first set of reports since companies signed up in January.

The signatories to the pledge said there has been a rapid change in consumer habits, especially in demand for lighter wines. This has contributed to significant reductions in the quantity of alcohol consumed. Sainsbury's report a 20% increase on sales of its lower-alcohol wines since October and Asda says sales of no and low-alcohol beer and cider has grown by a third in the past year. Booker has seen a reduction of more than 16 million units through sales of its own brands and competitors' reduced abv products.

According to new HMRC data, sales of lower strength beer - of 2.8% ABV or less - grew nearly 60% year-on-year between October 2012 and January 2013.

Heineken, Molson Coors and Carlsberg have all launched lower-abv beers recently. Diageo has reported increased sales of its new mid-strength Guinness (2.8% ABV) and plans to launch more lower-strength wines following its move to reduce the strength of its market leading Blossom Hill Californian white wine from 12% to 11.5% abv.

## 'Measuring kits' to reduce domestic alcohol consumption

The Drink Think Project has been handing out kits in off licences around Londonderry, containing measures for pouring wine and spirits in a move to raise awareness about drinks measures and units. The kit contains a drinks diary, with practical advice on how to cut back on alcohol consumption.

Joanne Smyth from the project said people tended to be 'very generous' when pouring drinks in their own home. "This is a very effective and simple way of getting people to cut back," Ms Smyth added.

## University students' spending on alcohol

Students in Birmingham spent more on alcohol than in any other city in the UK, according to a recent survey carried out by shopping website My Voucher Codes. The survey polled 2,115, 18-year-old university students from all over the UK about their spending habits.

The survey found that students in the Birmingham spend, on average, £68 per person, each week on bar drinks. Second on the list was Manchester, where students spent an average of £63.23 on drinks and third was London, with a £61.10 per week.

The study also asked students to estimate how many times a week they go out socialising at university, in an average term. The answers revealed that students in the UK go out an average of 4.2 times per week whilst at university; compared to just 1.7 times per week when back at home during the holidays.

Mark Pearson, chairman of MyVoucherCodes.co.uk, said: "We're all aware of the heavy partying that goes on at universities across the UK, but it's important for students to try and keep things under control financially, especially when it's your first year at university... Students obviously want to have a good time, but making sure you spend within your limits is vital."

### The UK's top spending student towns and cities

1. Birmingham – £68	6. Nottingham – £41.52
2. Manchester – £63.23	7. Leeds – £37.99
3. London – £61.10	8. Bristol – £35.81
4. Plymouth – £52.13	9. Liverpool – £31.12
5. Bournemouth – £47.61	10. Southampton – £28.42

## Netherlands report growth in low alcohol beer consumption

Findings from the National Beer Research in the Netherlands reveal that Dutch beer drinkers increasingly opt for alcohol-free beer. In 2013 46% of beer drinkers said they would opt for an alcohol free beer, versus 36% in 2012 (and 28% in 2011).

STIVA commented that it is a positive development that beer drinkers are able to choose a low or alcohol-free alternative; a choice made increasingly by beer drinkers if they have to drive.

[nederlandsebrouwers.nl](http://nederlandsebrouwers.nl)

## Why women drink - and how they can regain control by Gabrielle Glaser

Gabrielle Glaser documents findings of her investigation into female drinking in America in the book 'Her Best Kept Secret: Why Women Drink and How They Can Regain Control'.

Glaser found that women of all ages are drinking more than ever before. They drink more frequently and in larger amounts. More women are entering rehab, being charged with DUI's and being treated in emergency rooms intoxication.

For the most part, her book describes women who fit her own profile – second generation middle class, middle-aged married women. But Glaser talked to women of all ages from a variety of backgrounds and found some common triggers. Many women drink as a form of self-medication to ease depression or anxiety.

Glaser found that often some sort of role loss triggers depression and drinking: losing a spouse, divorcing, being an empty nester, losing your parents, job loss or hating your job. At the other end of the seesaw, women drink when they are juggling too many jobs, as they try to ease the anxiety that comes from being overextended.

Glaser shows that as scientists and health professionals learn more about women's particular reactions to alcohol, they are coming up with new and more effective approaches to excessive drinking, offering modern solutions to a very modern problem.

## Diageo - Think How You Drink campaign

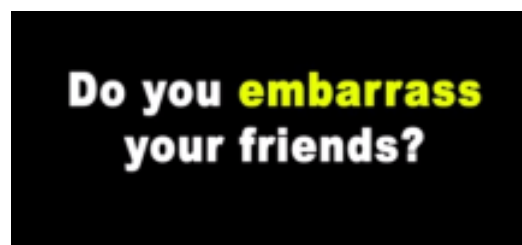
Binge drinkers who make a fool of themselves in public are to be shamed into cutting down on their alcohol consumption.

Embarrassing drunken antics are revealed in a funny YouTube video as part of the Think How You Drink campaign. Drunks are seen staggering in front of cars, toppling down steps and falling flat on their faces. Others are shown failing to pick up a lost shoe and fighting over a kebab.

Drinks maker Diageo hopes the one-minute film will encourage one million youngsters to drink responsibly. The firm believes that humour is more effective than scare tactics at getting its message across.

Marketing chief Malcolm D'Sa said: "Drinking to excess is a serious issue — but our primary concern is to be effective... Campaigns in the past have tended to preach or to scare. We are deliberately using humour to catch people's attention". The online campaign ties in with Diageo's other responsible drinking schemes — which include targeting student Freshers' weeks.

[youtube.com/watch?feature=player\\_embedded&v=Z4vLObF-0Yo](http://youtube.com/watch?feature=player_embedded&v=Z4vLObF-0Yo)



## Latvia - Law changes protecting underage drinkers

On Thursday, 20 June, the Saeima in the third and final reading supported amendments to the Handling of Alcoholic Beverages Law to limit the consumption of alcoholic beverages among children and young people in Latvia.

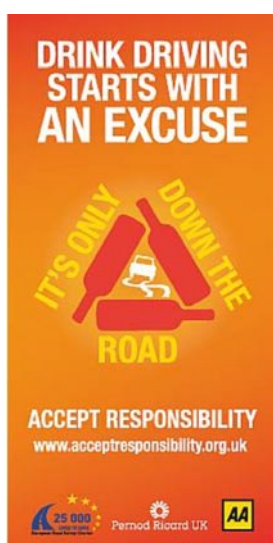
The amendments require a buyer of alcoholic beverages between 18 and 25 years of age to present identification to the salesperson without prompting. The amendments stipulate that as of 1 January 2014 all alcoholic beverages, except beer that does not exceed 5.8 abv must be sold in specially designated sections in supermarkets. Tasting of alcoholic

beverages outside of these designated self-service areas is prohibited.

The amendments also prohibit the sale of alcoholic beverages by distance contracts to social care, state or municipal institutions, except culture and sports institutions, for instance, in theatres and concert halls.

The Saeima rejected a proposal that was previously supported by the responsible committee and that prohibited the sale of alcoholic beverages in places that are situated less than 50 metres from an entrance to an educational institution.

## Pernod Ricard and the AA team up in summer anti-drink drive campaign



Pernod Ricard UK and the Automobile Association (AA) are launching an additional phase of their joint anti-drink driving consumer marketing campaign, which encourages drivers to 'accept responsibility' when it comes to drinking and driving. The advertising campaign will run over the summer-months until the end of September. Designed to address the ongoing issue of drink driving

among young adults in the UK, the campaign is targeted at 18-24 year-olds looking to enjoy casual drinking occasions in parks, pubs and friends' houses over the summer.

The campaign will promote anti-drink driving messages through digital and social media platforms as well as through 'Out of Home' advertising in pubs, clubs and restaurants. Online, the creative will be placed on Facebook, network sites and mobile applications such as text message advertising. The social media element of the campaign will appear during key usage periods when young adults would typically be socialising (between 6-11 pm Thursday to Saturday).

## Ireland –ban on sports sponsorship rejected

The Oireachtas Joint Committee on Transport and Communications has opposed calls for a ban on alcohol sponsorship of sporting events – it has recommended instead that the sponsorship of sporting events by the alcohol drinks industry should remain in place until such time as it can be replaced by other identifiable streams of comparable funding.

The Committee also recommends that a fixed percentage of all sponsorship received by sporting and cultural organisations from the alcohol drinks industry should be ring-fenced for alcohol and substance abuse prevention programmes.

The proposals are contained in a Committee report. Other recommendations include:

- Sponsorship of sports and sporting events be treated in the same way as sponsorship of the arts, music and other festivals;
- All sporting organisations be encouraged to support programmes which contribute to social inclusion in order to reduce the abuse of alcohol, particularly among young people;
- A Code of Practice for the consumption of alcohol within stadia be drawn-up by all sporting organisations, and
- Prohibition on sponsorship by the alcohol industry be considered only if it is done on a pan-European basis in order to ensure that Irish sports and sporting organisations are not operating at a disadvantage relative to their international competitors.

Detailed proposals to deal with alcohol misuse were presented by a Department of Health Steering Group last year, which included the phasing out of alcohol sponsorship of sporting and cultural events by 2016. In its role in shadowing the Department of Transport, Tourism and Sport, the Committee agreed to carefully consider the particular recommendation on sponsorship of sporting events.

[oireachtas.ie/parliament/media/committees/transportandcommunications/JCTC-Report-on-Sponsorship-of-Sports-by-the-Alcohol-Industry-July-2013.pdf](http://oireachtas.ie/parliament/media/committees/transportandcommunications/JCTC-Report-on-Sponsorship-of-Sports-by-the-Alcohol-Industry-July-2013.pdf)

## A review of patients who died with alcohol-related liver disease in the UK

'Measuring the Units' report released by the National Confidential Enquiry into Patient Outcomes and Death (NCEPOD) provides a review of patients who died with alcohol-related liver disease.

The report makes recommendations for Doctors, Consultants and Medical Directors. It calls for improvements in alcohol brief intervention (IBA), access to treatment, specialist alcohol care teams and improved pathways across hospitals.

[ncepod.org.uk/2013report1/downloads/Measuring%20the%20Units\\_full%20report.pdf](http://ncepod.org.uk/2013report1/downloads/Measuring%20the%20Units_full%20report.pdf)

**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**

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