



LABELLING

THE POINT

Towards better alcohol health information

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Per bottle



Foreword

In 2014, the Royal Society for Public Health (RSPH) published its first policy paper calling for the inclusion of calorie information on the labels of all alcoholic drinks. Unlike the majority of food and drink products, alcohol was and remains exempt from EU regulations requiring the provision of such nutritional information on the label.

It appeared to us that the proposed removal of this exception provided an obvious opportunity to help kill two birds with one stone: to raise awareness of the under-appreciated contribution made by the 'invisible calories' in alcohol to Europe's obesity epidemic, and at the same time utilise this lever in an attempt to encourage people to moderate their alcohol consumption and thereby lessen the strain of alcohol harm on the public's health.

Fast forward to March 2017, and the European Commission finally published its long-awaited report on the addition of nutritional information to alcohol labelling. The report made no legislative proposals; instead, it gave industry one year to present a self-regulatory solution, to be assessed by the Commission, who will then judge whether EU-wide regulation is necessary.

It is against this backdrop, and against that of the UK's preparations to leave the EU, that the following report is presented. In this arena at least, Brexit may present an opportunity – an opportunity to be an exemplar in the implementation of better alcohol labelling to inform and empower consumers to manage and moderate their alcohol consumption for the benefit of their health.

This is why RSPH and the Portman Group agreed to collaborate on the specific issue of labelling – to produce research that could shape what best-practice alcohol labelling might look like in the future, and put forward recommendations that have the backing of the industry that would be asked to implement them. In the event, even in the limited arena of labelling, it proved too difficult to reach a consensus position between the agenda of public health and that of industry. And so, this final report and its recommendations are presented from RSPH, with reference to the initial research report commissioned from our independent research consultancy, BritainThinks.

This report ranges far beyond RSPH's initial interest in calorie information, and considers a number of other forms of health information that could be provided, and how this can be done in the most user-friendly format to optimise the benefit to the public's health.

We have made great strides in the improvement of food and tobacco labelling. It is time for alcohol to catch up.



Shirley Cramer CBE

Chief Executive, Royal Society for Public Health



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1. Executive Summary

1. Alcohol is the third biggest lifestyle risk factor for preventable disease in the UK (after smoking and obesity), responsible for 10% of our total burden of disease and death. Although related deaths have remained relatively stable in recent years, they are still significantly higher than they were two decades ago: 14.8 deaths reported per 100,000 population in 2016 compared to nine in 1994. Meanwhile, more than 10 million people in the UK are drinking alcohol at levels that could be harmful to their health, a problem that costs the NHS alone around £3.5 billion every year.
2. The most effective policy measures to reduce alcohol-related harm are those designed to reduce the affordability of alcohol. Targeted approaches such as minimum unit pricing (MUP) in particular reduce consumption among the most at-risk drinkers by ensuring cost increases are passed on to consumers.
3. Although the potential contribution of alcohol labelling is modest in comparison, it provides an obvious opportunity to help reduce harm by influencing social norms around consumption – if harnessed correctly. Existing evidence for its efficacy is limited, but this may be because previous initiatives have been hampered by poor implementation.
4. The only health-related information currently mandated on alcohol labels by EU regulation is alcohol by volume (ABV). Other information currently appearing on some labels in the UK – such as alcohol content in units, pregnancy warnings, and the Government's low risk drinking guidelines – are provided voluntarily by industry. However, industry has failed to update labels in line with the new 14-unit low-risk guidelines introduced in January 2016, leaving public awareness of these guidelines at a stubbornly low 16%. Alongside this, only one in 10 people link cancer to alcohol consumption, and 80% don't know how many calories are in a glass of wine. The UK is facing an alcohol health awareness vacuum, and poor labelling is partially to blame.
5. This report assesses the potential of better labelling of off-trade (i.e. retail) alcohol to help raise awareness and moderate alcohol consumption and harm. This includes both better presentation of existing elements, and the addition of new ones such as calorie content and explicit health warnings. This is done using pre-existing literature, qualitative focus groups, and a quantitative survey of 1,783 UK adults who drink alcohol, which included a basic experiment to test the behavioural impact of calorie information. It identified the following key messages:
 - a) Awareness and use of current health information on alcohol labels is low. ABV is the primary driver of purchasing and drinking decisions, with alcohol units insufficiently understood to facilitate their practical use – they are effectively useless without clear linkage to CMO guidelines. Other health information elements, such as pregnancy warnings, are rarely noticed. This is a result of poor positioning, small size, and ineffective use of colour and font.
 - b) Presenting health information on the front of labels is critical to maximising exposure, so elements with the greatest potential to influence behaviour must be identified and presented here. However, presenting too much information leads to counterproductive information overload, so we must prioritise.



- c) The addition of calorie information to the front label of alcohol containers could lead to a modest but worthwhile in-category shift towards lower calorie (and therefore typically lower alcohol) products, across all drink types and socio-economic grades, with an especially pronounced effect among young and female drinkers. The average predicted swing from high to low ABV drinks is 9.5% (20% for young drinkers).
- d) Explicit health warning elements, including drink drive and pregnancy logos, and those warning of specific health conditions such as cancer, are particularly prioritised by young drinkers and more deprived socio-economic groups. In order to address harm within these priority groups and create labelling schemes that do not exacerbate health inequalities, RSPH considers that we should be responsive to this demand.
- e) Providing references to online information on labels has been demonstrated to be an ineffective measure with little popular demand, which is likely to engage only a small minority of consumers.
- f) Unit and calorie information will be most effective if presented in a way that reflects how people drink in reality – preferably per container, or per serving if the serving size is made clear.

On the basis of the above key messages, RSPH recommends the following health information elements to be included on all alcohol products. These elements have been selected on the basis of three criteria: public demand (especially key demographics), need for improved awareness, and demonstrable potential to positively influence behaviour. These elements should be presented in font no smaller (preferably bigger) than the main body text of the label, with pictographic information in bright and clearly contrasting colours. A mock-up of how this labelling scheme could appear in practice is provided on page 27.

ON THE FRONT LABEL:

- Alcohol by volume (ABV)
- Alcohol units (as a proportion of CMO's weekly guideline limit)
- Calorie content
- Drink drive warning
- Pregnancy warning

ON THE BACK LABEL:

- CMO's low-risk drinking guidelines (including warning of link to health conditions including cancer)

2. Background

Alcohol is the third biggest lifestyle risk factor for preventable disease in the UK (after smoking and obesity), responsible for 10% of our total burden of disease and death¹. According to Office for National Statistics (ONS) figures, there were 9,214 alcohol-related deaths in the UK in 2016 – a rate of 14.8 deaths per 100,000 population².

This rate has remained relatively stable in recent years, but is still significantly higher than it was two decades ago, having gradually risen from nine deaths per 100,000 population in 1994³.

The ONS figures, which allow comparison across the UK, are based primarily on chronic conditions associated with long-term alcohol abuse. However, they do not include external causes of death related to alcohol use, such as road traffic collisions. Nor do they include deaths from diseases partially attributable to alcohol, such as cancers of the mouth, oesophagus, liver, bowel and breast⁴. A definition that does include such factors, as used by Public Health England (PHE), suggests that there were 23,500 alcohol-related deaths in 2015 in England alone⁵.

This harm is distributed unevenly across demographic groups, reflecting socio-economic inequalities – alcohol-related mortality is 3.5 times higher for men in the most disadvantaged socio-economic group than for men in the least disadvantaged group, and at 5.7 times is even higher for women⁶. These differences across social groups are not correlated with alcohol intake and have yet to be fully explained, which is why they are described as ‘the alcohol harm paradox’.

It is estimated that more than 10 million people in the UK are drinking alcohol at levels that could be harmful to their health⁷. This is not only a problem for them personally, but creates a significant tab to be picked up by the rest of society – alcohol harm costs the NHS alone around £3.5 billion per year⁸.

With this in mind, we all – government, civil society and industry alike – have a responsibility to work together to lessen the burden of alcohol misuse. Alcohol product labelling – in so far as it has the potential to better inform consumers about the consequences for their health and nudge them towards moderating their alcohol intake – presents one obvious opportunity to do so.



3. What works to moderate alcohol consumption and reduce alcohol harm?

Alcohol-related harm is strongly related to the volume of alcohol consumed, although other factors including frequency of drinking and a range of social and environmental influences also intersect to amplify or mitigate harm – notably the ‘alcohol harm paradox’ whereby people in more deprived socio-economic groups suffer greater harm despite lower consumption. However, population-level alcohol consumption can be used as a general proxy for population-level alcohol harm, and measures aimed at reducing alcohol harm typically relate to one of three key influencers of alcohol consumption⁹:

- Price (affordability);
- Ease of purchase (availability);
- Social norms around consumption (acceptability).

Policies designed to reduce the affordability of alcohol, such as price regulation or increased taxation, have been found to be the most effective at reducing alcohol harm. It has been estimated that a 10% increase in price equates to a 5% reduction in consumption, which in the UK could lead to 1,300 fewer alcohol-related deaths and 61,000 fewer alcohol-related hospital admissions in the 20th year following implementation¹⁰.

In particular, targeted approaches such as minimum unit pricing (MUP) ensure cost increases are passed on to the consumer and reduce consumption amongst the heaviest and most at-risk drinkers, who have been shown to be more price-sensitive than moderate drinkers. For instance, in the Canadian province of Saskatchewan, a 10% increase in minimum prices reduced consumption by 8.4%¹¹, while in British Columbia, a 10% increase in minimum price was associated with a 32% reduction in wholly alcohol-related deaths within nine months¹². England-specific modelling predicts more than 400 fewer hospital admissions per 100,000 population among high risk drinkers in the 20th year following implementation¹³.

Policies to reduce the ease of purchase of alcohol, such as reducing the hours in which it is available for sale, have been found to substantially reduce harm in the night-time economy, as long as they are properly enforced. Studies have consistently shown that increasing opening by two or more hours increases alcohol-related harm, especially through road crashes, accidental injury and violence¹⁴. Conversely, initiatives in Australia to restrict opening hours have demonstrated a significant reduction in alcohol-related violence¹⁵.

Social norms around the consumption of alcohol can in part be shaped by policies on marketing, and there is some evidence to suggest restrictions in this area may reduce consumption and harm. Longitudinal and cohort studies of children and young people have consistently demonstrated that exposure to alcohol marketing increases the chance they will start drinking and the quantities they consume when they do¹⁶. Countries with stricter advertising restrictions have both lower alcohol use among adolescents¹⁷, and lower levels of hazardous drinking among older adults – 31% of those aged 50 to 64 drink at such levels in countries with no restrictions, compared to only 14% in countries with the greatest restrictions¹⁸.

However, there is not yet sufficient evidence to establish the most effective form for such regulation. Modelling studies have suggested complete or partial marketing bans would be highly effective – for instance, a US study estimated a complete advertising ban would reduce alcohol-related years of life lost by more than 16%¹⁹. Regulation in the UK has so far primarily taken the form of voluntary industry codes of practice, which have limited effectiveness and have been nullified by regular violations²⁰.

4. What's on the label now (and what effect does it have)?

Alcohol labelling is an ever-present part of the environment in which alcohol is purchased and consumed, at least in the off-trade. It therefore provides an obvious opportunity to influence the social norms around the consumption of alcohol, provided it is harnessed in the right way.

At present, legal regulation regarding alcohol labelling in the UK is primarily an EU competency, although this situation is likely to change in the coming years depending on the exact shape of the UK's exit from the EU and the form of its new relationship with the European Single Market. Current EU regulation mandates a set of information on alcohol labels that is limited in terms of its relation to health²¹:

- Name under which the product is sold (brand names must only be used in addition to the generic name of the type of alcohol, not instead of).
- Net quantity in metric units (e.g. millilitres, centilitres, litres).
- Alcohol by volume (ABV) (provided this is over 1.2%).
- Best before date.
- Instructions for use, where appropriate.
- Any special conditions for keeping or use.
- Name and address of the manufacturer, packager or importer in the EU.
- Place of origin.
- Lot marking, with the marking preceded by the letter L.

While a number of EU member states have already introduced their own legal requirements for additional health information on labels – such as a compulsory pregnancy warning in France²² – the UK Government has to date not opted to go down this route. Any additional information currently provided on alcohol labels in the UK is provided voluntarily by industry. The Portman Group's previous best practice guidelines – as enshrined in the 2011 Public Health Responsibility Deal with the UK Government – recommended a standard set of health-related information which

industry signatories pledged would appear on at least 80% of alcohol products by 2013. This included three required elements²³:

- Alcohol content in units.
- The Government's recommended low risk drinking guidelines.
- A pregnancy warning, either in the form of a circular logo with an image of a pregnant woman, or the statement 'avoid alcohol if pregnant or trying to conceive'.

And two further optional elements:

- The Drinkaware website address.
- One of the following three responsibility messages:
 - 'Know your limits'.
 - 'Enjoy responsibly'.
 - 'Drink responsibly'.

According to an industry-commissioned audit in 2014, 79% of alcohol products in the off-trade bore the three required elements, falling to 70% when the products are weighted by market share²⁴. An independent academic study corroborated these findings, reporting 78% compliance in an unweighted sample²⁵.

However, the mere presence of the required elements is not the whole story. Only 57% of these labels met the Portman Group's best practice guidance on how these elements should be presented. This guidance states that the health information should be in "*a font size no smaller than the main body of the label*", and yet 60% of products used a smaller font – the average of 8.2 points is well below the 10 or 11 point size that is optimum for legibility. In most cases (79%), the pregnancy warning appears on the back label, and significantly smaller on wine bottles than on beer, even though the former is more likely to be consumed by women²⁶.

Regrettably, this situation now risks becoming significantly worse, due to new labelling guidance published by the Portman Group in September 2017 which removed the Government's recommended low-risk alcohol guidelines as a required element²⁷. This may be seen as an uncooperative reaction to the revising down of these guidelines, in January 2016, to no more than 14 units per week for both men and women. Even before the Portman Group's new guidance was issued, a review by the Alcohol Health Alliance (AHA) earlier in 2017 found only one label in 315 assessed carried the updated low risk guidelines²⁸. Little wonder, then, that only 16% of people in the UK are currently aware of the 14 unit guideline, two years after its introduction²⁹.

Public Health England (PHE)'s recent evidence review stated that there is little evidence to suggest that current alcohol labelling makes a significant contribution to reducing alcohol harm. Despite this, PHE regards labelling as an important component in any overall policy approach, as it fulfils the consumer's right to be properly informed about what they are drinking, and can increase public support for other, more directly effective policy measures³⁰.

Studies in France (where pregnancy warnings are mandatory) have suggested that this element at least has contributed to heightened public awareness of the dangers of drinking alcohol while pregnant, and has helped move the social norm towards not drinking at all at this time – although this effect may be due as much to the publicity that surrounded the introduction of the measure as to the physical presence of the warnings themselves³¹. Similarly, studies in the US have found that recall of these warnings among pregnant women is high³², and that women in their first pregnancy were most likely to heed the warnings and reduce their drinking accordingly³³.

Unit information, while well recognised by consumers, may be being used by some, especially young drinkers for the opposite of its intended purpose – that is, to find the cheapest products containing the greatest amount of alcohol³⁴.

Using labels to direct consumers to further health information online – such as that on the Drinkaware website – is widely thought to be of limited utility compared to presenting information on the label itself, due to the conscious and proactive decision needed by each individual to access this information. An Australian survey found that only 7% of respondents followed the address on the label to their national equivalent of the Drinkaware site³⁵.



5. What else could be on the label (and what effect could it have)?

PHE's evidence review suggests that the lack of existing evidence for the effectiveness of alcohol labels in changing drinking behaviour may, in part, be down to poor implementation such labels to date³⁶. In order to suggest how effectiveness may be improved, we may consider:

- How existing labelling elements be better presented.
- What other labelling elements could be added (informed in part by initiatives in other countries, and in different contexts such as food and tobacco labelling).

In terms of the presentation of existing elements, it has already been shown that there is room for improvement in the placement and legibility of health information to at least meet industry minimum standards. A pan-European study has demonstrated strong consumer preference for pictograms alongside (46%) or instead of (47%) written information alone (7%)³⁷, while an assessment of the use of pregnancy warning pictograms in France has highlighted poor placement and lack of colour contrast as constraints on their effectiveness³⁸.

Other labelling elements that have been suggested or trialled include:

- List of ingredients.
- Allergen information.
- Calorie content.
- Other nutritional information (e.g. sugar, fat, salt content, potentially in a format similar to the 'traffic light' system on most food labels in the UK).
- Health warnings (beyond those aimed specifically at pregnant women, and potentially with a pictorial element and/or related to specific health conditions e.g. cancer).
- Drink drive warning.
- Legal purchase age warning.

Experience from tobacco labelling strongly suggests that explicit health warning labels, particularly pictorial labels, can be effective not only in raising awareness but also in influencing behaviour change.

At least a quarter of respondents in all four countries in the International Tobacco Control evaluation (the UK, USA, Canada and Australia) reported that these warnings had made them more likely to quit³⁹. Such warnings are also thought to have indirectly influenced behaviour change by stimulating peer pressure from non-smokers⁴⁰. Translating this to the alcohol context, a Cancer Research UK survey in 2015 found about 50% of people would find labels warning of the link between alcohol and cancer believable and acceptable⁴¹. This could go some way to addressing a severe lack of awareness around this issue, with only one in 10 people linking cancer to alcohol consumption⁴².

There is also some evidence to suggest drink drive warnings may be effective, with research indicating that drinkers who have previously driven while under the influence of alcohol are significantly more likely to deliberately avoid doing so after seeing these labels. US studies have suggested they may also help provoke a protective peer pressure effect from other adult consumers⁴⁴.

While there is currently limited direct evidence for the potential impact of calorie labelling on drinking behaviour, the high level of awareness and understanding of calories among the UK public makes this a worthwhile avenue for exploration. An RSPH survey in 2014 found that 80% of UK adults do not know or underestimate the number of calories in a large glass of wine, while more than 60% do not know or underestimate the calories in a pint of lager⁴⁵. This represents a sizeable awareness gap which, if filled, may provide a moderating impact on alcohol consumption – which accounts for an average of 8.4% of the calorie intake of people who drink⁴⁶ – especially among more calorie-conscious demographics such as women and more advantaged socio-economic groups, who, research suggests, are already susceptible to this approach on food packaging⁴⁷. The same RSPH survey found more than two thirds (67%) of UK adults support the addition of calorie information to alcohol labels⁴⁸.

6. What do the public think?

In light of the patchy and inconsistent nature of the existing evidence on the potential of alcohol labelling to positively influence drinking behaviour, RSPH and the Portman Group agreed to jointly commission a research project to help build a more complete picture. This included the following objectives:

- To establish if and how current alcohol labelling affects consumer behaviour.
- To investigate what other forms of information could better influence behaviour.
- To establish where and how information should be presented for optimal impact.
- To explore how these effects vary across alcohol types and demographics.

The independent research organisation BritainThinks was commissioned to conduct exploratory qualitative research with the public exploring these themes. This initial research took the form of four focus groups of six people each, conducted in September 2016. These were split demographically as follows:

- **Group 1:** London, male, age 25-50, social grades A/B/C1, including two BAME.
- **Group 2:** London, female, age 25-50, social grades C2/D, including two BAME.
- **Group 3:** Manchester, male, age 25-50, social grades C2/D, including two BAME.
- **Group 4:** Manchester, female, age 25-50, social grades A/B/C1, including two BAME.

All focus group participants consumed alcohol at least once a month, while those whose attitudinal responses indicated possible alcohol dependency were screened out.

Insights from the focus groups were then used to shape the design of a quantitative survey, using a representative UK-wide sample of 1,783 adults who drink alcohol (from an initial polling size of 2,107 – non-drinkers were screened out at the first question). Roughly half the survey respondents were classified as ‘lower risk’ drinkers and half as ‘increasing or higher risk’ – although few statistically significant differences were identified between their responses. The survey was carried out online in February 2017 by Populus Data Solutions on behalf of RSPH and the Portman Group.

The full results of this research will be published independently by BritainThinks. They are re-presented below in line with RSPH’s interpretation of their utility.

“ I can't even read this with my reading glasses it's so small! ”

Focus group participant (male, London)

6.1 Knowledge and use of current alcohol labels

The focus groups suggested that awareness and use of current health information on alcohol labels is low, with participants struggling to spontaneously identify what information is currently provided.

“ I drink pints, so I never think in units, I just think in pints. ”

Focus group participant (male, Manchester)

Most participants did have some awareness of ABV, which was seen as easy to understand, and this is the labelling element participants were most likely to report using to inform their purchasing and drinking decisions – be it to ensure they were not inadvertently drinking alcohol stronger than they expected, or, in a minority of cases, to guard against being “tricked” into buying drinks of lower than expected strength. However, while there was some awareness of the presence of alcohol unit information, this was not generally well enough understood to facilitate its practical use. There was confusion regarding the connection between units and individual alcohol tolerance and over what a unit equated to in practice, combined with a lack of knowledge of low risk guidelines.

Participants were generally unaware of the CMO unit guidelines typically provided on the back label and how they could use this to contextualise the unit information often provided on the front. When this information was pointed out, it was felt that it would carry more weight if presented as from a medical professional or organisation with global credibility, rather than the UK Government.

“ No-one cares what the government thinks, but they might listen to a doctor. ”

Focus group participant (male, Manchester)

These insights were borne out by the survey, in which respondents were asked what forms of information they think are currently found on a normal alcohol container (free text responses were coded to a comprehensive list, including both health and product/brand information). The top responses were (*for full breakdown see fig. 1*):

1. ABV (75%)
2. Alcohol units (29%)
3. Place of origin (27%)
4. Ingredients (26%)
5. Container size (25%)

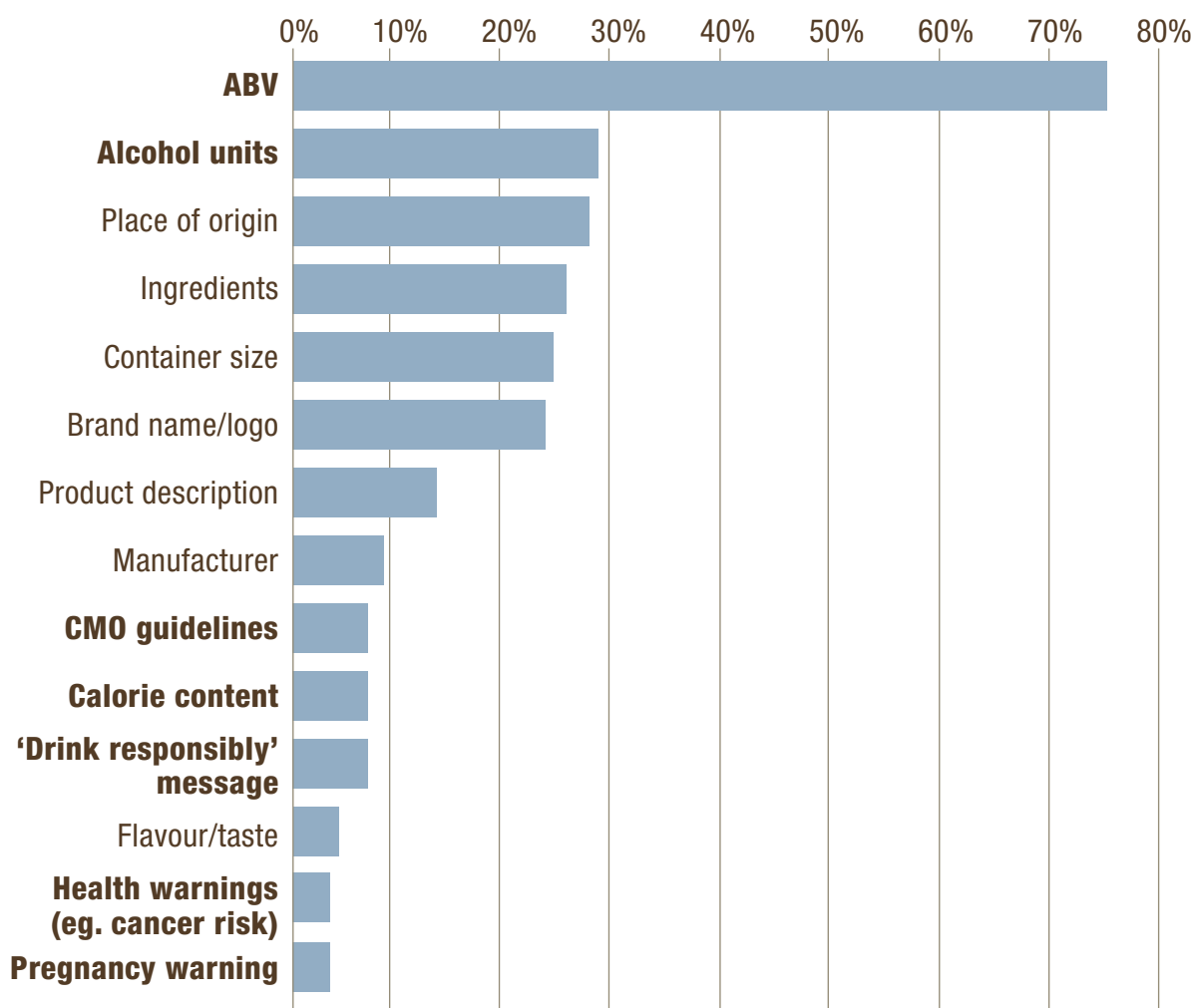
This puts ABV, cited by three quarters of respondents, far ahead of any other information in terms of current consumer awareness. While a significant minority (29%) also mentioned alcohol units, only a very small fraction of respondents mentioned other forms of health information, such as the ‘drink responsibly’ message (7%) and pregnancy warnings (4%).

“ (I use ABV for) the opposite! If there are new beers out and stuff you don't want to be tricked by 2.2%. ”

Focus group participant (female, Manchester)

It is notable that awareness of alcohol unit information seems to increase significantly among younger drinkers, with 42% of 18-24 year olds and 37% of 25-34 olds mentioning this, compared with only 24% of 55-64 year olds and 16% of those aged 65 or over. Awareness of other health information is heightened among younger drinkers too: 14% of 18-24 year olds cited pregnancy warnings compared with 0% of those aged 55 or over.

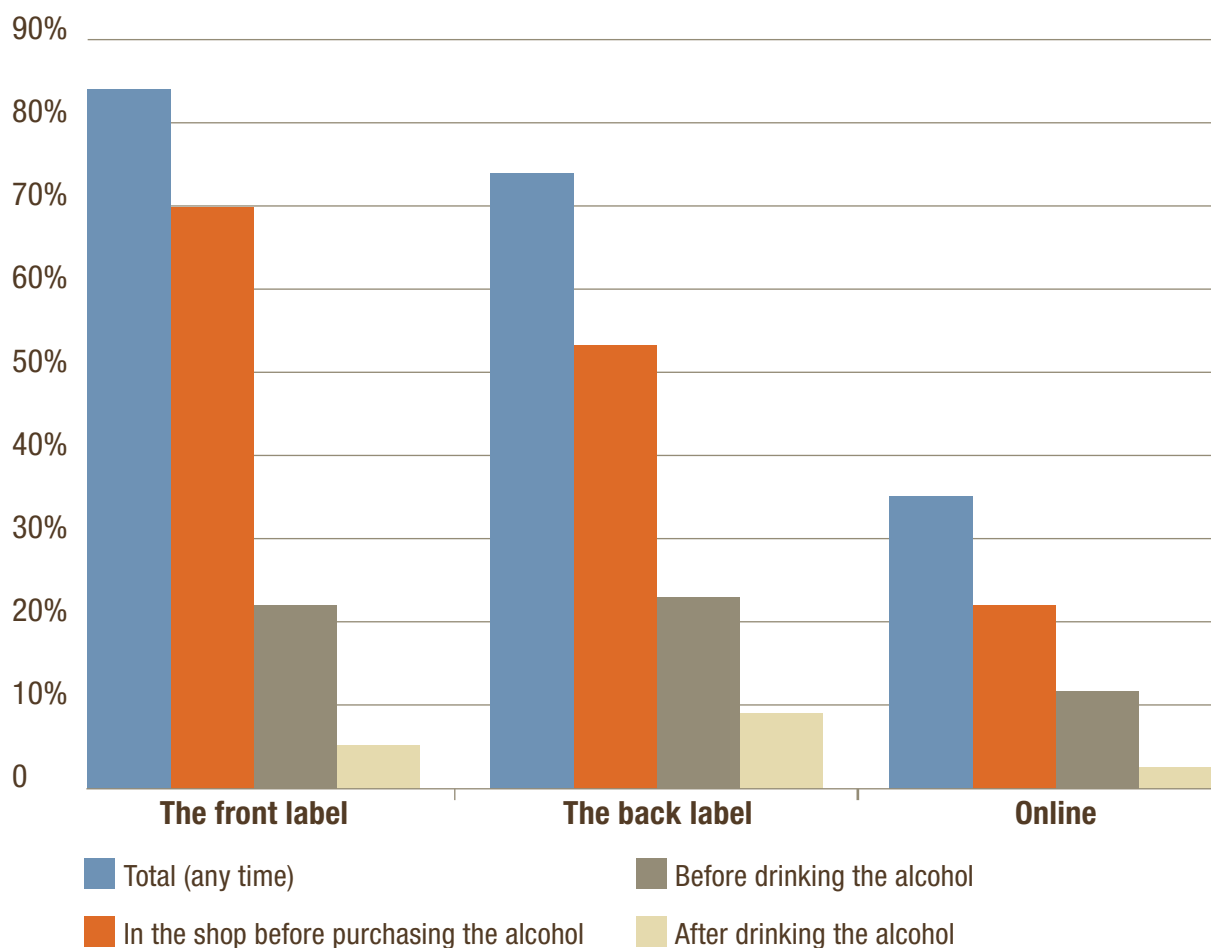
FIG. 1: Information believed to be on current alcohol containers.



Respondents were also asked when and where they look for information about the alcohol they are purchasing. A full breakdown of responses is shown in fig. 2.

The majority (84%) look at the front label, and this is mostly done in the shop before purchase (70%). However, three quarters (74%) also look at the back label, and for more than half (53%) this is before purchase. Only 35% of consumers ever look online, and this takes place before the purchasing decision for less than a quarter (23%).

FIG. 2: Looking for alcohol information: time and place.



Respondents were then asked what forms of information they look for in these locations and at these times (free text responses were coded to a comprehensive list, including both health and product/brand information). The top responses for those looking before purchase were:

1. ABV (58%)
2. Brand (19%)
3. Product description (18%)
4. Place of origin (15%)
5. Flavour/taste (11%)

Only a small minority (22%) of respondents look for information after the purchase but before consumption. However, it is notable that alcohol unit information doubles in importance at this time, from 5% before purchase to 11% before consumption. This shift is predominantly accounted for by younger drinkers, with one in five 18-24 year olds (20%) checking unit information at this time.

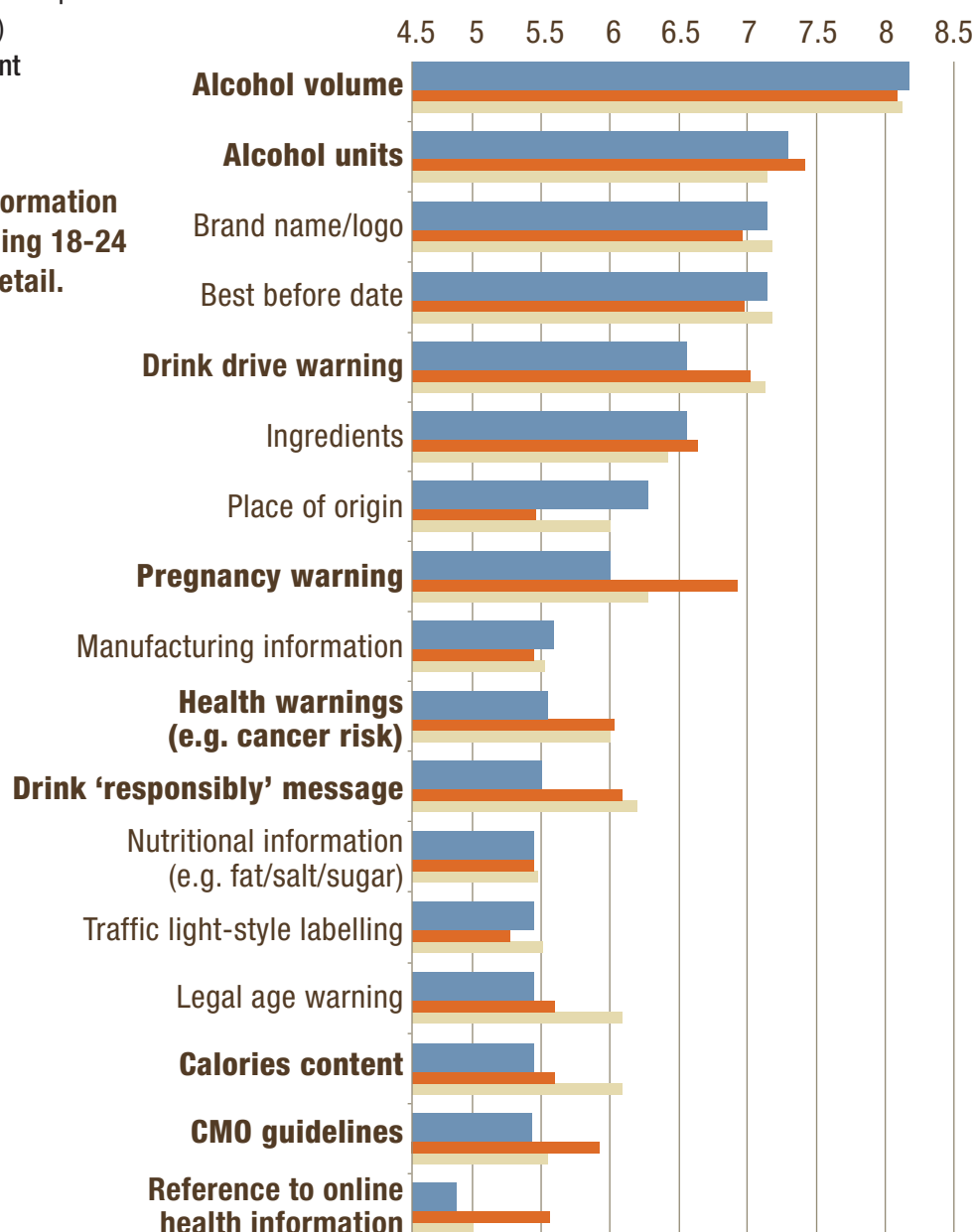
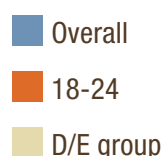
6.2 Priorities and demand for health information

Focus group participants identified three clear priorities for health information on alcohol labels, which should be displayed in an eye-catching manner on the front of the container to ensure quick and easy use in the purchasing environment:

1. ABV
2. Alcohol units (as long as clearly contextualised by CMO guidelines – unit information was judged to be incomprehensible and unusable without these)
3. Calorie content

Although calorie content was not spontaneously mentioned, it came to be regarded as increasingly important the more it was discussed – most participants understood calories but were unaware of the calorie content of alcoholic drinks and thought this information would be useful, particularly for women and those watching their weight. Additionally, an initial hostile reaction from some women to the potential ‘guilt’ factor suggests calorie information may indeed impact the drinking behaviour of such women.

FIG. 3:
Alcohol label information priorities, including 18-24 and D/E group detail.



The top two are confirmed by the survey, in which respondents were asked to score different forms of information on a scale of zero to 10 according to how important it is that they appear on alcohol labels (non-health related information was included to assess where health sits within overall information priorities). The mean scores are shown in fig. 5 (*health information highlighted*).

Unlike the focus groups, here calorie content scores relatively low at 5.36 – although it was rated as more important by women (5.80) and those aged 35-44 (5.84). Unlike in an extended discussion, survey respondents are unlikely to have fully considered its potential efficacy.

Pregnancy warnings enjoyed higher prioritisation among women (6.24), young drinkers (18-24: 6.80) and more deprived socio-economics groups (D/E: 6.28). Focus group participants has flagged these as more important than age or drink drive warnings, citing confusion over whether pregnant women can drink a little or not at all.

Higher prioritisation was seen among the above three groups across most forms of health information, including drink drive warnings (women: 6.74, 18-24: 6.98, D/E: 7.10), and health warnings for conditions such as heart disease, liver disease and cancer (women: 5.83, 18-24: 6.11, D/E 6.02). Such health warning labels, similar to those provided on cigarette packaging, were spontaneously raised by participants in the Manchester group, who felt this would be an effective way of encouraging people to moderate their drinking. In contrast, participants in the London group spontaneously suggested that “traffic light” labels similar to those on food would be an efficient and well-understood way of communicating alcohol by volume and calorie content.

The only suggested labelling element to receive a sub-5 prioritisation score (4.81) was references to online health information, for instance a QR (Quick Response code) or URL linking to the Drinkaware

website or similar. This confirms insight from the focus groups, where it was felt such references were unlikely to be effective. Most participants stated they would not use them, with the active engagement necessary deemed unlikely in a typical purchasing environment, as well as being less useful than being able to physically compare information on products label-to-label.

“ If I were drinking a bottle of wine with friends, I'm not going to get my phone and say what's that (the QR code). So I'd be none the wiser, but if it's on the bottle it would make me aware. ”

Focus group participant (female, London)

Respondents were also asked how they felt about the current balance between health information and product/brand information on alcohol labels. The majority (70%) felt the current balance is about right. However, slightly more respondents (18%) felt there is too little health information compared to product/brand information than felt the opposite (12%).

“ It's designed to blend in. I don't think people like to be reminded how much they are drinking. ”

Focus group participant (male, Manchester)

6.3 Presentation (location and format) of health information

During the focus groups, it was almost universally felt that current health information presentation is insufficiently attention-grabbing, with small font sizes and poor colour contrast making information hard to read. Participants felt that consumers are unlikely to look at the back of the container, and so information presented there is unlikely to be noticed by more than a small minority. Together, these factors fuelled a perception among some participants that manufacturers are attempting to hide health information from consumers.

“ The minute you put the information on the front, you start judging on whether it's a healthy or unhealthy product. ”

Focus group participant (female, London)

Subsequently, survey respondents were asked about where they thought different forms of health information should be provided. For all forms of information, respondents expressed a strong majority preference for this to be on the label, rather than online, on the shelf or not at all. The only caveat to this is for legal age warnings, which a significant minority (20%) suggested should be on the shelf. A full breakdown is shown in fig. 4.

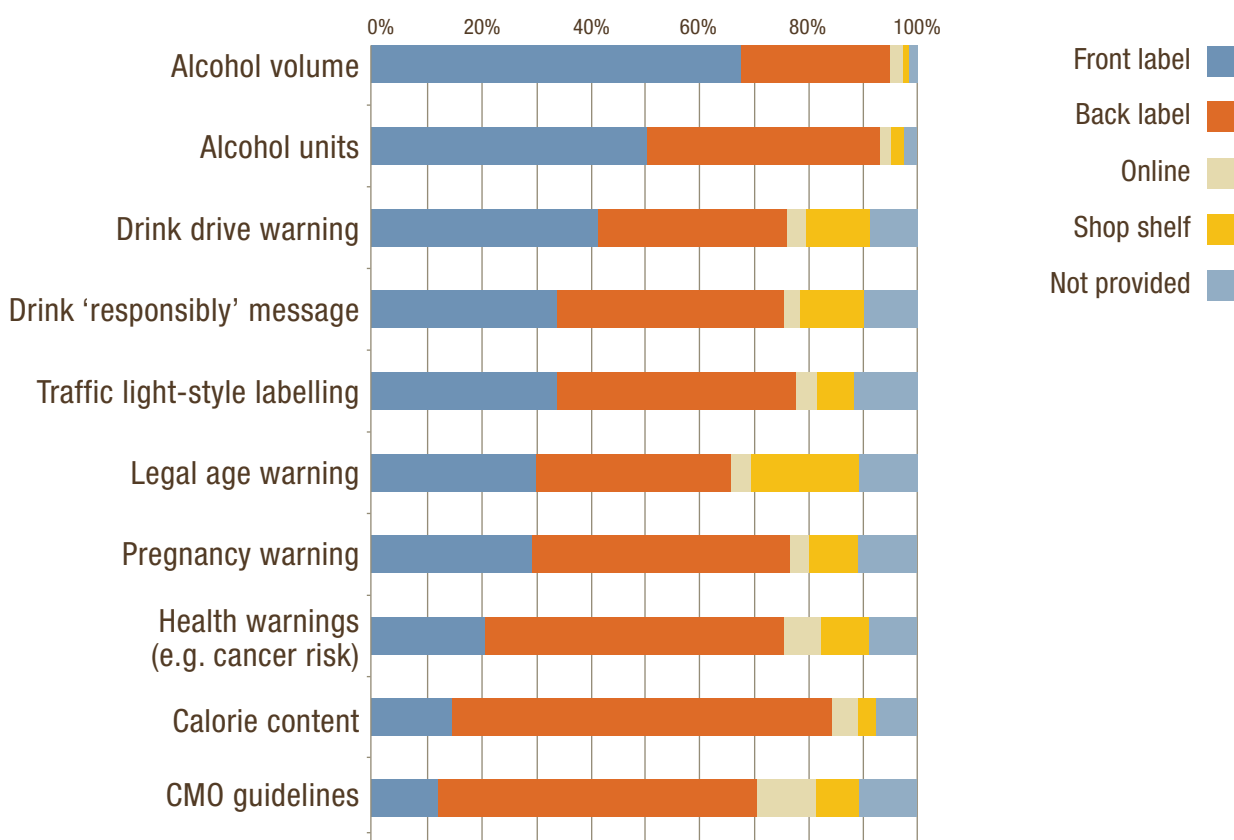
A majority of respondents said the following information should be on the front label:

1. ABV (68%)
2. Alcohol units (51%)
3. Drink drive warning (41%)

A majority of respondents said the following information should be on the back label:

1. Calorie content (70%)
2. CMO guidelines (59%)
3. Health warnings (e.g. cancer risk) (55%)
4. Pregnancy warning (47%)
5. Traffic light-style labelling (44%)
6. 'Drink responsibly' message (42%)
7. Legal age warning (36%)

FIG. 4: Preferred location of alcohol health information.



Since focus group participants also expressed a desire that labels should not be overfilled, and that the provision of additional health information should not come at the expense of branding, respondents were then asked which they would find most helpful: a select amount of health information displayed in a large and clear format, or much information as possible, even if this reduced visibility. Respondents expressed a clear preference by 80% to 20% for the former. Too much information presented in a cluttered fashion could lead to ‘information overload’ and none of this information being communicated effectively. Finally, respondents were also asked what format they would find most usable for calorie and alcohol unit information. ‘Per container’ was deemed the most helpful in both instances (46% for calories, 48% for units), followed by per serving (39% for both) (see fig. 5). This partially reflects the focus groups, where it was asserted that information should be presented in a format that is relatable to people’s real life drinking behaviours – preferably ‘per container’, rather than variable serving sizes or ‘per 100ml’.

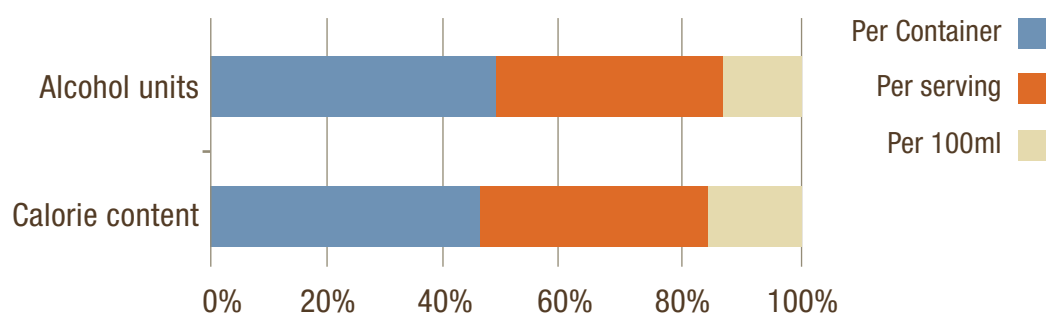
6.4 The potential impact of calorie information

The survey included a basic experiment designed to assess the potential impact of adding calorie information to the front label of alcohol containers on purchasing behaviour.

In this experiment, respondents were presented with three successive images of a shop shelf containing three alcohol containers (all either beer, wine or spirits, depending on the respondents’ preference expressed at the start of the survey), and asked to imagine they were choosing which one of each set of three to purchase.

- On the first image, only ABV was provided on the containers.
- On the second image, only calorie content was provided on the containers.
- On the third image, both ABV and calorie content were provided.

FIG. 5: Alcohol unit and calorie content format preferences.



In each set, the ABV and/or calorie content varied by container – one with a low-range value, one with a mid-range value, and one with a high-range value. When presented together, ABV and calorie content co-varied – as a general rule, this is the case with most alcohol products (although the addition of flavourings and mixers complicates the relationship for some drinks). All other details of the containers were the same, to ensure the tested variables were the only basis for choice. *An example of one of the images used is shown in fig. 6.*

FIG. 6: Wine ABV and calorie shelf image used in survey.

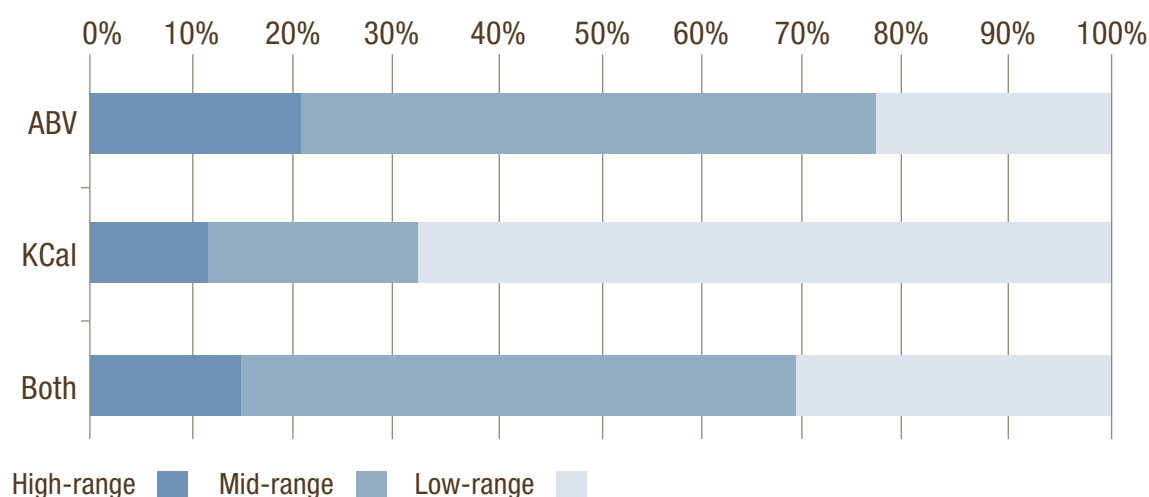


Note: in this exercise all other variables (e.g. price, brand, taste) were controlled, in order to present respondents with an ‘all other things being equal’ choice. As such the results do not necessarily reflect the extent of behaviour change in a real world purchasing environment, and should be taken as an indicative hypothesis for more in depth research.

For the respondents who saw beer containers, the combination of calorie information with ABV led to a significant shift in hypothetical purchase choice from the high-range bottle (which fell from 21% to 15%) to the low-range bottle (which rose from 23% to 30%) when compared with the provision of ABV alone.

This shift was particularly pronounced for women – among whom the high-range choice fell from 20% to 12%, and the low-range choice rose from 27% to 41% – and younger drinkers (aged 18-24) – among whom the high-range choice fell from 27% to 10%, and the low-range choice rose from 50% to 66%. *A full breakdown is shown in fig. 7.*

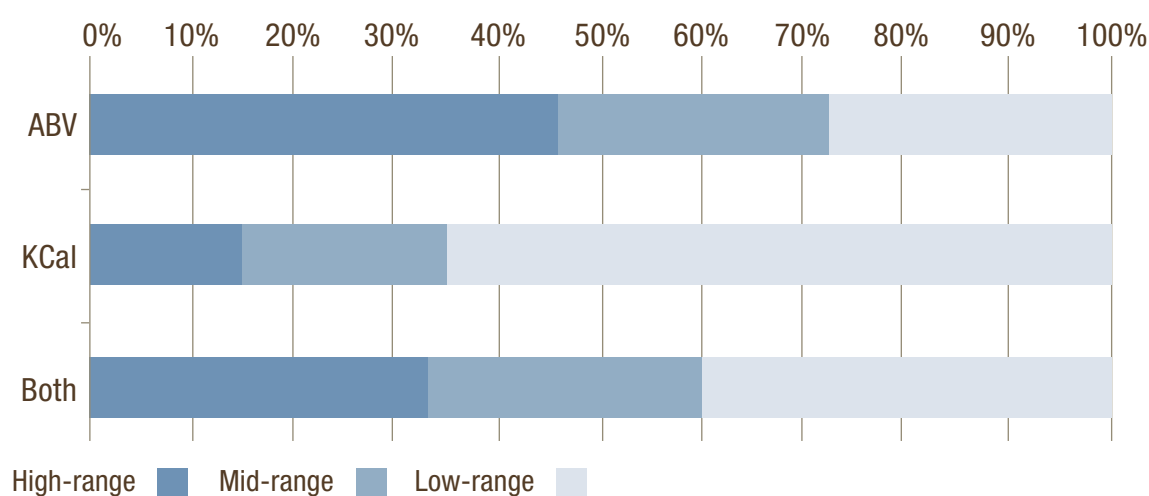
FIG. 7: Beer purchase choice by information provision.



For the respondents who saw spirit containers, the combination of calorie information with ABV led to a similar shift in hypothetical purchase choice from the high-range bottle (which fell from 52% to 34%) to the low-range bottle (which rose from 28% to 40%), meaning low-range replaced high-range as the majority choice.

This shift was again particularly strong among women and younger drinkers. High-range fell from 43% to 23% among women and from 65% to 38% among 18-24 year olds, and low-range rose from 36% to 51% among women and from 14% to 33% among 18-24 year olds. A full breakdown is shown in fig. 8.

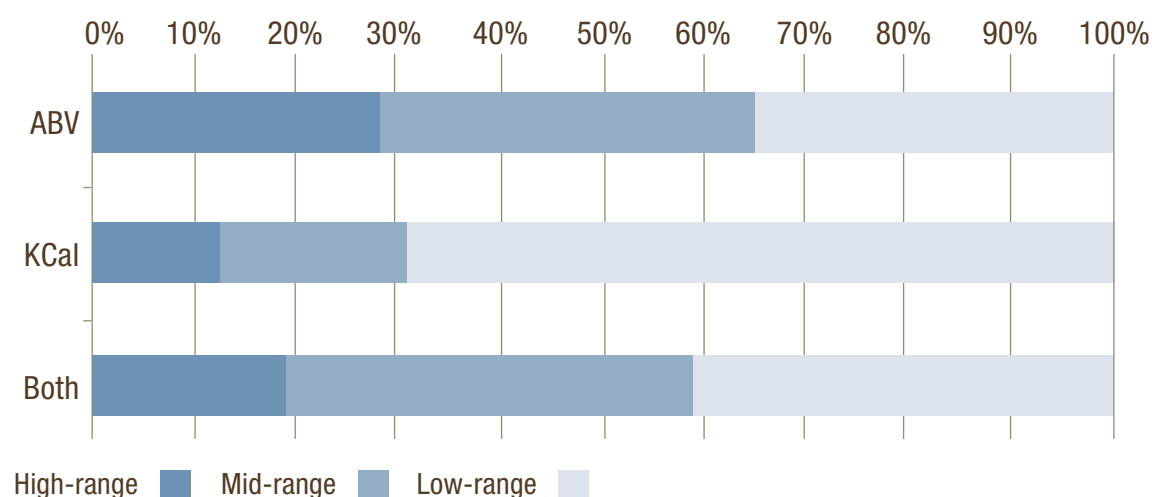
FIG. 8: Spirit purchase choice by information provision.



For the respondents who saw wine containers, the combination of calorie information with ABV again caused those choosing the high-range bottle to fall, from 29% to 20%, while those choosing the mid-range bottle rose from 36% to 39%, and the low-range bottle rose from 35% to 41%. This meant low-range replaced mid-range as the majority choice.

Once again, this shift was particularly pronounced for younger drinkers, with the high-range choice falling from 41% to 21% and the low-range choice rising from 12% to 33% among 18-24 year olds. *A full breakdown is shown in fig. 9.*

FIG. 9: Wine purchase choice by information provision.

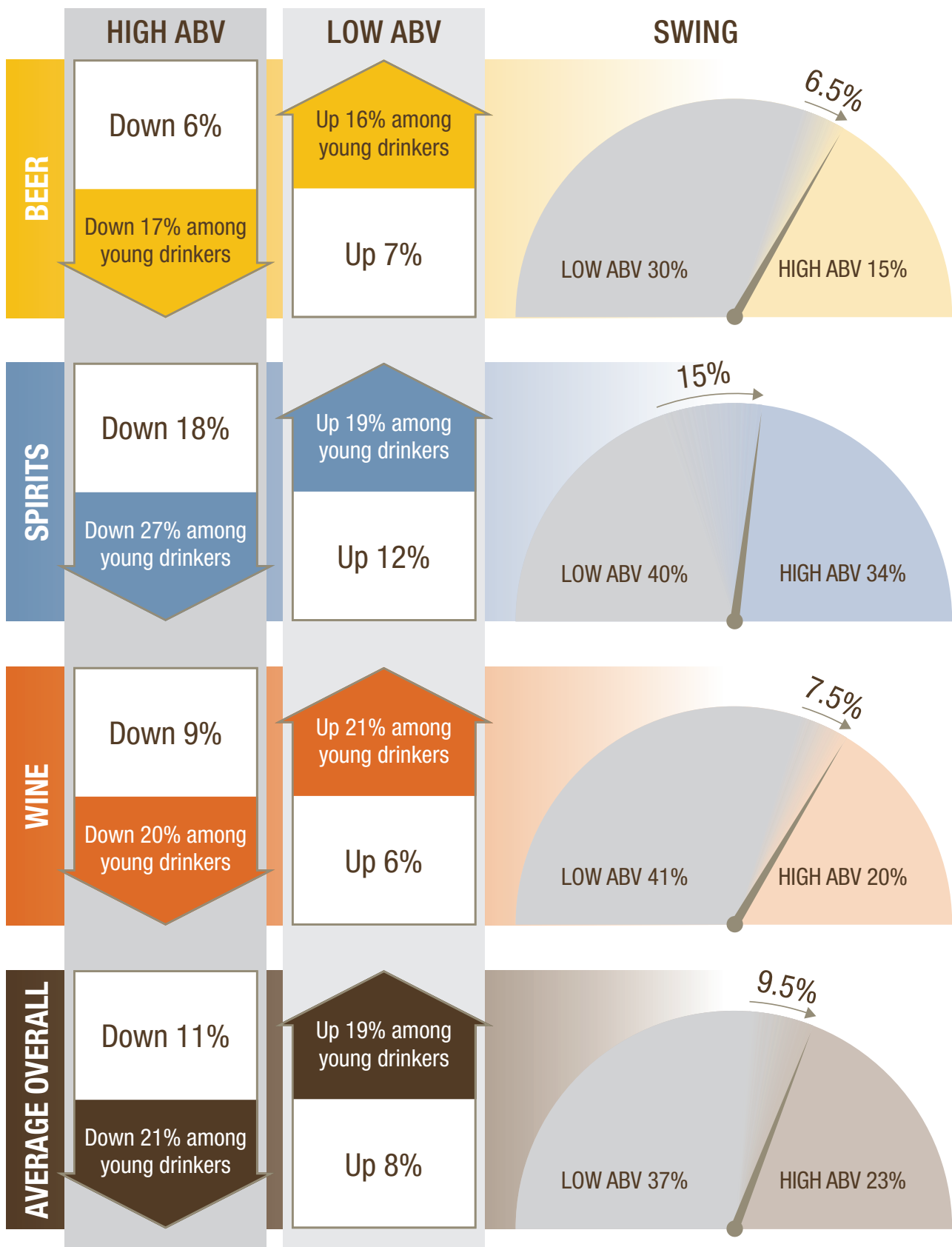


On average across the three drink categories, high-range ABV choices went down by 11% and low-range ABV choices up by 8% when calorie information was added to the labels (down 21% and up 19% respectively among young drinkers). This equates to a 9.5% swing from high to low (20% among young drinkers).

“ I think it's individual choices really. But because of the problem of obesity, calorie content should be on everything. ”

Focus group participant (female, Manchester)

FIG. 10: Experiment results: when calorie information is added to ABV



7. Discussions and conclusions

To date, the efficacy of alcohol labelling in influencing change in drinking behaviour has not been proven, but nor has it been disproven. As has been suggested, lack of evidence to this effect thus far may well be connected to poor implementation. A conclusive judgement cannot be made until a methodically designed and rigorously implemented labelling scheme has been trialled. In order to design such a scheme we must answer the two questions posed in section 5 of this report:

- How can health information labelling elements be better presented?
- Which health information labelling elements (current or proposed) should be used?

The presentation of health information labelling elements has been found by existing literature to be too small to be easily legible or noticeable on the majority of current alcohol labels. This helps explain the low awareness of existing health information demonstrated in the focus groups, which also asserted that factors such as small fonts and poor colour contrast make current health labelling insufficiently attention-grabbing.

It is no coincidence that the only form of health information the overwhelming majority of both focus group participants and survey respondents are aware of being on labels (ABV, 75%) is typically presented on the front. Health information which is currently presented on the back label, such as pregnancy warnings and CMO guidelines, was forgotten by all but a small minority.

Focus groups asserted that this was because, in reality, very few consumers consulted back labels. This was confirmed to some degree by the survey data, which found that 84% of consumers look at the front label, and 70% do so before purchase, making this the optimum place to present information to influence behaviour. As 74% stated that they also look at the back label, the value of information presented here cannot be entirely discounted. However, only 53% do so at the critical in-shop, pre-purchase stage.

Since the results show that presenting health information on the front label would maximise exposure and given the limited space available there, it is important that those elements with the greatest potential to positively influence behaviour are identified and prioritised. The focus groups highlighted the importance of not overfilling labels, as this can lead to a counterproductive information overload where by providing too much information, none of it is communicated effectively. This was confirmed in the survey by a clear majority (80%) in favour of select information expressed clearly, as opposed to comprehensive information that may be less clear. A clear majority of respondents (70%) also felt that the balance between health information and product information on labels is currently about right, so the public tolerance for health information expanding its physical label space footprint may be limited.

As regards specific health information labelling elements that have been proposed or are already in use:

- **ALCOHOL BY VOLUME (ABV)** was the top consumer priority identified by both the focus groups and survey respondents, including for presentation on the front label. It is widely understood, and is the only form of information actively sought out by the majority (58%) of respondents – although there were suggestions that it may sometimes be used for the opposite of moderating drinking behaviour.
- **ALCOHOL UNITS** are the second consumer priority identified by both the focus groups and survey respondents, including for presentation on the front label. However, the focus groups made clear that a lack of understanding means this information is unusable by many unless presented in conjunction with CMO consumption guidelines, awareness of which is low. Survey respondents stated a preference for these guidelines to be presented on the back, but given the lower visibility of back label information, the challenge is to find an effective way of connecting the two. A traffic-light style system, suggested unprompted in some focus groups, may be one potential mechanism for bridging this gap (with the caveat that a green light could only ever be potentially considered for a non-alcohol product).

- **CALORIE CONTENT** was designated as the third consumer priority by the focus groups, following discussion. However, this demand was not backed up by the survey, in which it achieved a relatively low prioritisation score of 5.36, and a clear majority (70%) in favour of back, rather than front, label inclusion. However, higher prioritisation scores from women (5.80) and 35-44 year olds (5.84) back up experience from food labelling suggesting calorie information may influence behaviour in specific demographics. The initial hostile reaction of some women in the focus groups could potentially be interpreted to suggest that it may help moderate alcohol consumption via a 'guilt' mechanism.

Furthermore, the results of the purchasing preference experiment carried out in question 13 of the survey suggest that the addition of calorie information to the front label of alcohol containers could lead to a modest but worthwhile in-category shift towards lower calorie (and therefore typically lower alcohol) products, across all drink types and all (not just higher) socio-economic grades, although there is an especially pronounced effect among young and female drinkers. Although this exercise was a basic experiment that could not fully replicate the real-world purchasing environment, its results represent a strong hypotheses for more rigorous research exploration. If confirmed by further research, this effect could serve to spur an enhanced industry focus on reformulation to produce lower alcohol/lower calorie products. It should also be caveated that the experiment was not able to test whether the introduction of calorie information would encourage cross-category switching.

The most widely understandable format for unit and calorie information, as identified by both the focus groups and the survey, is per container, followed by per serving – although the latter should only be used if the serving size is made clear.

- **HEALTH WARNINGS** relating to specific risks – such as drink driving and pregnancy – although not prioritised by focus group participants, were felt to be important by a significant proportion of survey respondents. Both drink drive (6.53) and pregnancy warnings (6.03) achieved plus-6 prioritisation scores – significantly high given the tendency of survey respondents to gravitate towards the middle of rating scales. These warnings scored especially high among young drinkers (18-24) and more deprived socio-economic groups (D/E). Given the priority of addressing alcohol harm within these groups, RSPH considers that we should pay particular attention to these results – especially if we are to avoid labelling schemes that exacerbate existing health inequalities. More generalised health warnings related to conditions such as heart disease, liver disease and cancer – similar to those on cigarette packets – which were suggested unprompted in some focus groups, also achieved plus-6 prioritisation scores among these two demographic groups.

- **REFERENCES TO ONLINE INFORMATION** have been shown in existing literature to be ineffective at achieving engagement. The focus groups backed this up, with participants stating they were unlikely to use them as it required a level of active effort that few would make in a fast-paced, real life purchasing environment. This was confirmed by the survey, in which only 35% of respondents said they ever look online for information, and only 23% do so before purchase. This was the only suggested labelling element to receive a sub-5 prioritisation score (4.81).

8. Recommendations for best practice alcohol labelling

On the basis of the above findings, as well as the literature reviewed earlier in this report, RSPH recommends that the following health information elements should be included on all alcohol containers. While these recommendations draw on the levels of public demand for, and acceptance of, various forms of information as set out above, they also balance this against the need to give consumers the information that is most necessary to raising awareness (particularly low awareness of the CMO guidelines and the relationship between alcohol and cancer), and that has demonstrable potential to positively influence behaviour (especially calorie information).

While it is hoped that industry will show willing to make these improvements voluntarily, RSPH would, to ensure consistency, urge the UK Government to legislate to make these elements mandatory. RSPH would welcome the development of larger-scale academic research to further demonstrate the potential efficacy of these measures.

ON THE FRONT LABEL: (maximum exposure/utility)

- **Alcohol by volume (ABV)**
 - WHY? Most widely understood, utilised and demanded piece of information by the public (and already mandatory).
- **Alcohol units (per container, or per serving if the serving size is made clear, and as a proportion of the CMO's weekly low-risk guideline limit - traffic light optional)**
 - WHY? Second most widely understood, utilised and demanded piece of information by the public, necessary for quantifying/monitoring consumption.
- **Calorie content (per container, or per serving if the serving size is made clear)**
 - WHY? Likely to nudge drinkers towards lower alcohol products, particularly young and female drinkers; fulfil consumer right to be informed.
- **Drink drive warning (in the form of a pictogram)**
 - WHY? Address lingering confusion/ignorance – particularly wanted by young drinkers and more deprived socio-economic groups, tackling alcohol harm among whom is a priority.
- **Pregnancy warning (in the form of a pictogram)**
 - WHY? Address lingering confusion/ignorance – particularly wanted by young drinkers and more deprived socio-economic groups, tackling alcohol harm among whom is a priority.

ON THE BACK LABEL: (limited exposure/utility)

- **CMO's low-risk drinking guidelines (14 units weekly, phrased in line with the latest guidelines as "to keep the risk of developing a range of health problems (including cancers of the mouth/throat, bowel and breast) to a low level", and cited as issuing from a medical professional rather than government)**
 - WHY? Unit information useless without their context; public awareness of guidelines and health risks, especially cancer, still very low.

To ensure maximum exposure, written information should be presented, as per the Portman Group's own previous guidelines, in a font no smaller than the main body of the label, and pictographic information should be presented in a bright colour that contrasts clearly with the background and surrounding text. Ultimately, unless these presentational and graphic design considerations are got right, it will not matter which labelling elements are included as none will be noticed with sufficient regularity by the consumer and they will be rendered effectively useless – in implementing better health labelling, industry must demonstrate that inconspicuousness is not its intention. *An example of how this labelling scheme could appear in practice is provided in fig. 11 opposite.*

FIG. 11: Mocked-up best practice label (front and back).



9. References

1. Alcohol Concern. 2016. Alcohol statistics. <https://www.alcoholconcern.org.uk/alcohol-statistics> (accessed 14 February 2017).
2. Office for National Statistics. 2017. Alcohol-related deaths in the UK. <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/datasets/alcoholrelateddeathsintheunitedkingdomreferencetable1> (accessed 7 January 2018).
3. Ibid.
4. Parkin, D. 2011. Cancers attributable to consumption of alcohol in the UK in 2010. *British Journal of Cancer* 105 (2): 14-18.
5. Public Health England. 2017. Local Alcohol Profiles for England (LAPE): February 2017 data update. <https://www.gov.uk/government/statistics/local-alcohol-profiles-for-england-lape-february-2017-data-update> (accessed 14 February 2017).
6. Alcohol Concern. 2016. Alcohol statistics. <https://www.alcoholconcern.org.uk/alcohol-statistics> (accessed 23 March 2017).
7. Public Health England. 2016. The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies: An evidence review. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/583047/alcohol_public_health_burden_evidence_review.pdf (accessed 14 February 2017).
8. Alcohol Concern. 2016. Alcohol statistics. <https://www.alcoholconcern.org.uk/alcohol-statistics> (accessed 14 February 2017).
9. Public Health England. 2016. The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies: An evidence review. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/583047/alcohol_public_health_burden_evidence_review.pdf (accessed 14 February 2017).
10. Angus, C. et al. 2015. Modelling the impact of Minimum Unit Price and Identification and Brief Advice policies using the Sheffield Alcohol Policy Model. https://www.shef.ac.uk/polopoly_fs/1.6614451/file/Final_mup_iba_report.pdf (accessed 6 March 2017).
11. Stockwell, T. et al. 2012. The Raising of Minimum Alcohol Prices in Saskatchewan, Canada: Impacts on Consumption and Implications for Public Health. *American Journal of Public Health* 102 (12): 103-110.
12. Zhao, J. et al. 2013. The relationship between minimum alcohol prices, outlet densities and alcohol-attributable deaths in British Columbia, 2002-09. *Addiction* 108 (6): 1059-1069.
13. Angus, C. et al. 2015. Modelling the impact of Minimum Unit Price and Identification and Brief Advice policies using the Sheffield Alcohol Policy Model. https://www.shef.ac.uk/polopoly_fs/1.6614451/file/Final_mup_iba_report.pdf (accessed 6 March 2017).
14. Public Health England. 2016. The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies: An evidence review. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/583047/alcohol_public_health_burden_evidence_review.pdf (accessed 14 February 2017).
15. Kypri, K., McElduff, P. & Miller, P. 2014. Restrictions in pub closing times and lockouts in Newcastle, Australia five years on. *Drug and Alcohol Review* 33 (3): 323-326.
16. Public Health England. 2016. The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies: An evidence review. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/583047/alcohol_public_health_burden_evidence_review.pdf (accessed 14 February 2017).
17. Paschall, M.J., Grube, J.W. & Kypri, K. 2009. Alcohol control policies and alcohol consumption by youth: a multi-national study. *Addiction* 104 (11): 1849-1855.
18. Bosque-Prous, M. et al. 2014. Association between stricter alcohol advertising regulations and lower hazardous drinking across European countries. *Addiction* 109 (10): 1634-1643.
19. Hollingworth, W. et al. 2006. Prevention of Deaths From Harmful Drinking in the United States: The Potential Effects of Tax Increases and Advertising Bans on Young Drinkers. *Journal of Studies on Alcohol and Drugs* 67 (2): 300-308.
20. Public Health England. 2016. The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies: An evidence review. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/583047/alcohol_public_health_burden_evidence_review.pdf (accessed 14 February 2017).
21. European Alcohol Policy Alliance. 2014. What's not on the bottle? Eurocare Reflections on Alcohol Labelling. http://www.eurocare.org/resources/policy_issues/labelling/eurocare_papers/what_s_not_on_the_bottle_eurocare_reflections_on_alcohol_labelling (accessed 20 March 2017).
22. Institute of Alcohol Studies. 2016. International evidence and best practice on alcohol labelling. <http://www.ias.org.uk/uploads/pdf/IAS%20summary%20briefings/sb09032016.pdf> (accessed 20 March 2017).
23. Department of Health. 2011. Public Health Responsibility Deal. <https://responsibilitydeal.dh.gov.uk/pledges> (accessed 23 March 2017).
24. Campden BRI. 2014. Audit of compliance of alcohol beverage labels available from the off-trade with the Public Health Responsibility Deal Labelling Pledge. https://responsibilitydeal.dh.gov.uk/wp-content/uploads/2014/11/Campden-BRI_Audit-of-PHRD-labelling-compliance-2014-_FINAL-report_October2014-final.pdf (accessed 23 March 2017).
25. Petticrew, M. et al. 2015. Health information on alcoholic beverage containers: has the alcohol industry's pledge in England to improve labelling been met? *Addiction* 111 (1): 51-55.
26. Petticrew, M. et al. 2015. Health information on alcoholic beverage containers: has the alcohol industry's pledge in England to improve labelling been met? *Addiction* 111 (1): 51-55.
27. Portman Group. 2017. Communicating alcohol and health-related information. <http://www.portmangroup.org.uk/docs/default-source/alcohol-health-toolkit/final-for-publication-08-sept-17.pdf?sfvrsn=2> (accessed 7 January 2018).

28. Alcohol Health Alliance. 2017. Right to know: are alcohol labels giving consumers the information they need? <http://ahauk.org/right-know-alcohol-labels-giving-consumers-information-need-2017> (accessed 8 January 2018).
29. Alcohol Health Alliance. 2017. Awareness of drinking guidelines remains low, 2 years after their release. <http://ahauk.org/awareness-drinking-guidelines-remains-low-2-years-release> (accessed 8 January 2018).
30. Public Health England. 2016. The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies: An evidence review. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/583047/alcohol_public_health_burden_evidence_review.pdf (accessed 14 February 2017).
31. Guillemont, J. 2009. Labelling on alcoholic drinks packaging: the French experience (presentation to the CNAPA meeting, February 2009). http://ec.europa.eu/health/ph_determinants/life_style/alcohol/documents/ev_20090217_co08_en.pdf (accessed 20 March 2017).
32. Mazis, M.B., Morris, L.A. & Swasy, J.L. 2004. Longitudinal study of awareness, recall, and acceptance of alcohol warning labels. *Applied Behavioral Science Review* 4 (2): 111-120.
33. Hankin, J.R. et al. 1996. Heeding the alcoholic beverage warning label during pregnancy: Multiparae versus nulliparae. *Journal of Studies on Alcohol* 57 (2): 171-177.
34. Jones, S.C. & Gregory, P. 2009. The impact of more visible standard drink labelling on youth alcohol consumption: helping young people drink (ir) responsibly? *Drug and Alcohol Review* 28 (3): 230-234.
35. Coomber, K. et al 2015. Do consumers "Get the facts"? A survey of alcohol warning label recognition in Australia. *BMC Public Health* 15 (1): 816.
36. Public Health England. 2016. The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies: An evidence review. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/583047/alcohol_public_health_burden_evidence_review.pdf (accessed 14 February 2017).
37. European Alcohol Policy Alliance. 2015. RARHA consumer survey on communication of alcohol associated risks. <http://www.eurocare.org/content/download/19171/104877/file/WP5%20Consumer%20survey%20on%20communication%20of%20alcohol%20associated%20risks%20FINAL.pdf> (accessed 20 March 2017).
38. Institut national de prévention et d'éducation pour la santé (INPES). 2013. Compte-rendu de la session: Prévention de l'alcool pendant la grossesse. Paris.
39. Ferrence, R., Hammond, D. & Fong, G.T. 2007. Warning labels and packaging. In Bonnie, R.J., Stratton, K. & Wallace, R.B. (eds.): *Ending the Tobacco Problem: A Blueprint for the Nation*. Washington: National Academies Press (435-448).
40. Ferrence, R., Hammond, D. & Fong, G.T. 2007. Warning labels and packaging. In Bonnie, R.J., Stratton, K. & Wallace, R.B. (eds.): *Ending the Tobacco Problem: A Blueprint for the Nation*. Washington: National Academies Press (435-448).
41. Byukx, P. et. al. 2015. An investigation of public knowledge of the link between alcohol and cancer. University of Sheffield and Cancer Research UK.
42. Ibid.
43. Greenfield, T., Graves, K., & Kaskutas, L. 1999. Long-term effects of alcohol warning labels: findings from a comparison of the United States and Ontario, Canada. *Psychology & Marketing* 16: 261-282.
44. Tam, T.W. & Greenfield, T.K. 2010. Do alcohol warning labels influence men's and women's attempts to deter others from driving when intoxicated? *Human Factors and Ergonomics in Manufacturing and Service Industries* 20 (6): 538-546.
45. Royal Society for Public Health. 2014. Increasing awareness of 'invisible' calories from alcohol. <https://www.rsph.org.uk/as-set/3E720285-6630-496C-95A3283D3441CBA3> (accessed 23 March 2017).
46. Public Health England. 2016. National Diet and Nutrition Survey Results from Years 5 and 6 (combined) of the Rolling Programme (2012/2013 – 2013/2014). https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551352/NDNS_Y5_6_UK_Main_Text.pdf (accessed 18 April 2017).
47. Kiszko, K. et al. 2014. The influence of calorie labelling on food orders and consumption: A review of the literature. *Journal of Community Health* 39 (6): 1248-1269.
48. Royal Society for Public Health. 2014. Increasing awareness of 'invisible' calories from alcohol. <https://www.rsph.org.uk/as-set/3E720285-6630-496C-95A3283D3441CBA3> (accessed 23 March 2017).
49. Full demographic breakdown available from RSPH on request.
50. Values used on the alcohol container images used in the survey were based on real products and are as follows:
 - Beer ABV: low-range = 2.8%, mid-range = 5%, high-range = 7%.
 - Beer Kcal: low-range = 79, mid-range = 142, high-range = 188.
 - Wine ABV: low-range = 10%, mid-range = 12%, high-range = 14%.
 - Wine Kcal: low-range = 84, mid-range = 105, high-range = 125.
 - Spirit ABV: low-range = 35%, mid-range = 37.5%, high-range = 40%.
 - Spirit Kcal: low-range = 50, mid-range = 55, high-range = 60.

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DRINK RESPONSIBLY

To minimise risk of alcohol associated health problems including
cancers of the mouth, bowel & breast, doctors recommend
drinking no more than:

14 units weekly

JAN-2018

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ALC.4.5% VOL