Like a needle in a vineyard:

Searching for health information on wine labels and websites

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Contents

Acknowledgements

Research designed and report written by Alcohol Focus Scotland with significant support from Alcohol Change UK, the Alcohol Health Alliance UK (AHA), and Action on Sugar.

Alcohol Focus Scotland (AFS) is the national charity working to prevent and reduce alcohol harm. We want to see fewer people have their health damaged or lives cut short due to alcohol, fewer children and families suffering as a result of other people's drinking, and communities free from alcohol-related crime and violence.

Alcohol Change UK (ACUK) is an alcohol charity formed from the merger of Alcohol Concern and Alcohol Research UK. Our vision is of a world free from serious alcohol harm. Together we will work towards five key changes: improved knowledge; better policies and regulation; shifted cultural norms; improved drinking behaviours; and more and better support and treatment.

The Alcohol Health Alliance UK (AHA) is an alliance of more than 60 non-governmental organisations which work together to promote evidence-based policies to reduce the harm caused by alcohol. Members of the AHA include medical royal colleges, charities, unions, treatment providers and other organisations that want to tackle alcohol harm.

Action on Sugar is a group of specialists concerned with sugar and its effects on health. It is successfully working to reach a consensus with the food industry and Government over the harmful effects of a high sugar diet, and bring about a reduction in the amount of sugar in processed foods.

Executive Summary

Alcohol Focus Scotland (AFS), Alcohol Change UK (ACUK), the Alcohol Health Alliance UK (AHA), and Action on Sugar, analysed the sugar and calorie content of 30 wines from across the UK's top 10 wine brands. The review also sought to establish the extent to which this information was available to consumers either on the product label or online.

This research indicates that the amount of sugar and calories someone consumes from wine will depend not only on the type of wine they drink, but what particular product they choose. The nutritional analysis demonstrated the variation in the amount of sugar found across categories of wine, with fruit wines containing almost eight times as much sugar, on average, than white wines. On average, rosé, sparkling, and fruit wine had higher sugar content than white or red wine. The variation in sugar content was evident even within wine categories. For example, 125ml of the rosé wine with the highest sugar content contained almost two teaspoons more sugar than 125ml of the rosé wine with the lowest sugar content.

The calorie content of wine is determined by both the sugar content and alcohol content of the wine. Despite being lower in sugar, the red and white wines were on average more calorific than the other categories sampled; this is linked to their stronger alcohol strength. Conversely, the fruit wines, which were among the most sugary products, had fewer calories. There were significant variations in calorie content across and within wine categories. For example, a 125ml glass of fruit wine could contain anything from 54.1 calories to 88.3 calories.

Many labels recommended 125ml as a serving size for a glass of wine. However, it is more common in on-sales for a standard serving to be 175ml and a large glass to be 250ml. Additionally, home-poured measures are less controlled and likely to be bigger, with research showing that when drinking at home, people often pour themselves volumes larger than 125ml. It is therefore likely that the number of calories and grams of sugar that people will be consuming per glass will be higher than detailed within this report.

With the large variation in nutritional content across and within different types of wines, the provision of this information is vital for people to be able to know how much they are consuming. However, the study reveals that this information is not being provided by manufacturers, frequently missing from labels and websites. None of the labels surveyed displayed full nutritional information, while only 20% displayed calorie information. Only four of the 30 products (13%), which belonged to the same brand, provided full nutritional information online, including calories and sugar content. This information was only available in the frequently asked questions (FAQ) section of the relevant brand, rather than on their specific product pages.

This study also added to the body of evidence on the ineffectiveness of the voluntary system of alcohol labelling in the UK. One in six (17%) of the products reviewed had no or incorrect information on the low risk drinking guidelines, with limited use of health warnings and other warnings like drink driving and age warnings. Although all the labels displayed a pregnancy warning in symbol format, none provided this in text form. None of the labels surveyed displayed a full list of ingredients. Some brands took an inconsistent approach to labelling, providing information on some products but not others.

In the absence of information about nutritional content on alcoholic drinks, people cannot tell how much sugar or calories they are consuming from alcohol and are kept in the dark as to how alcohol contributes to their diet. Nutritional information, alongside other key health information, should be easily accessible to drinkers to enable them to make informed decisions.

Alcohol Focus Scotland, Alcohol Change UK, the Alcohol Health Alliance UK (AHA), and Action on Sugar recommend that in the interest of public health and consumer rights, the UK and devolved governments should use their powers to:

1) **Mandate, monitor, and enforce the provision of health information on alcohol packaging.**

The industry should be required to provide information on the risks of consuming alcohol, as well as unit content, the low risk drinking guidelines, a pregnancy warning in graphic and text form, and nutrition and ingredients listings on all alcohol packaging.

2) **Specify the content and design of information in regulations, informed by consumer research, and developed free from industry influence.**

In line with the World Health Organization's recommendation,[1] the content and design of health information should be specified. As has been the case with health warnings on tobacco products, consumer testing is needed to inform the content and design of health information to maximise impact. This must be developed free from industry influence.

1. Introduction

1.1 Alcohol Harms in the UK

Alcohol causes over 200 conditions and diseases, including liver disease, cancer, heart disease and stroke.[2] Alcohol use is the biggest risk factor for death, ill-health and disability among 15-49-year-olds in the UK,[3] with around 25,000 people losing their lives to alcohol each year.[4] Around a quarter (24%) of adults in England[5] and Scotland[6] regularly drink more than the Chief Medical Officers' low-risk drinking guidelines of 14 units per week.[7]

Alcohol can also contribute significantly to the calorie intake of adults who drink, consisting of "empty calories" which offer no nutritional value. According to the Royal Society of Public Health, a unit of pure alcohol alone can contain 56 calories.[8] Evidence shows that nearly 10% of the daily calorie intake of an adult who drinks comes from alcohol.[9] [10] For some people, alcohol can be a risk factor for obesity, especially if they drink heavily or binge drink.[11]

1.2 Labelling

Despite alcohol's significant impact on health, public awareness of alcohol harm is limited, with most people in the UK unaware of the links between alcohol and its various health harms.[12] Similarly, people lack awareness of the calories in alcoholic drinks, with no sign of improvement over time: in both 2014 and 2021, over 80% of survey respondents did not know or underestimated the number of calories in a glass of wine.[13] [14]

Labelling is a simple and effective way for people to access complete information at the point of purchase and consumption, enabling them to make informed decisions about what they drink, and alerting them to the presence of ingredients that are potentially harmful, over and above common allergens.[15] Providing nutritional information such as sugar and calorie content could help people maintain healthier lifestyles.[16] Improved alcohol labelling could also help address the public's currently limited knowledge of alcohol harm, meet their need for information, and realise their right to health. Labelling and information provision are likely catalysts for long-term, albeit gradual, change.[17]

Much can be learned from tobacco policy, another health-harming product. Since 2008, tobacco packaging in the UK has been required to display a combined written and pictorial warning covering a range of smoking-related conditions, including cancer.[18] Health warnings on tobacco packaging have been considered essential in informing people about the health effects of smoking.[19] Pictorial warnings on tobacco packaging have increased intentions to quit smoking, reduced cigarette consumption and reduced the likelihood of smoking uptake.[20] [21]

Findings from a recent review of alcohol labelling research suggest that presenting unit information alongside drinking guidelines would improve consumer understanding. The review also found that including health warnings on alcohol labels could raise awareness of health risks and may encourage reduced consumption; specific warnings, such as for cancer, were found to be particularly effective.[22] For example, a Canadian intervention found that prominent labels with low risk drinking guidelines, a cancer warning, and unit information, contributed to increased awareness and knowledge of drinking guidelines[23] and alcohol's role in causing cancer[24] as well as a 6.3% reduction in consumption.[25]

1.3 Current Status of Alcohol Labelling

At present, alcohol labels in the UK are only required to display the volume of the container, strength of the product (% ABV), and whether the product contains any of the top 14 allergens. All other information including the Chief Medical Officers' low risk drinking guidelines, health warnings, pregnancy warnings, ingredients, nutritional information, and the number of units of alcohol in the container may be included voluntarily by the alcohol producer.

A review of 424 alcohol containers published by the Alcohol Health Alliance (AHA) in 2020[26] found that this voluntary approach results in poor and inconsistent practice:

- 29% of the labels reviewed included the current low risk drinking guidelines
- 95% displayed the units per container and 48% displayed the units per serving
- Almost all (97%) labels displayed a pregnancy warning logo, but only 15% of labels included written information about the risks of drinking during pregnancy
- Information on unit content and pregnancy warnings were often too small to read clearly
- Only one label featured a health warning
- 28% listed ingredients
- Just 7% provided full nutritional information and 37% listed calories only (44% included any nutritional information)
- 26% included a warning about drink-driving
- 7% included an age warning
- Branded products were less likely than supermarket own brands to provide some information on labels, such as drinking guidelines and nutritional content.

The provision of health information on alcohol product labelling remained inadequate and inconsistent in a more recent review conducted in 2022:

- 65% of the products examined included the current CMO drinking guidelines
- 3% of products included a health warning
- Just 20% of the products provided a full list of ingredients
- 5% of products provided full nutritional information
- 41% of products stated calorie content
- 6% of products displayed sugar content

Changes to labelling regulations in the EU are under active consideration, with plans to introduce mandatory health warnings and nutrition and ingredient listings as part of Europe's Beating Cancer Plan.[27] The UK and devolved Governments have committed to consult on the provision of calorie information and low risk drinking guidelines on labels.

2. Methods

2.1 Focus of Study

Although information existed on the estimated calorie and sugar content of wine in general, the specific content of individual products, and across different product types, was unknown. Previous reviews of product labelling showed that this information was not readily provided on alcoholic drinks. For example, in a 2019 review of alcohol labels in the UK, sugar content was provided on just 6% of products and calorie content on two fifths of products reviewed.[28] This was of particular concern considering the public's continued lack of awareness of the calories in alcoholic drinks; in 2014 and 2021 surveys, over 80% of respondents did not know or underestimated the number of calories in a glass of wine.[29] [30]

To ascertain a more accurate picture of the nutritional content of alcoholic drinks, Alcohol Focus Scotland, Alcohol Change UK, the Alcohol Health Alliance UK, and Action on Sugar decided to build on previous research by Action on Sugar. Their analysis of 202 ready-to-drink products showed that despite some products containing 9 teaspoons of sugar in a 250ml can, just 9% of products had on-pack sugar information.[31]

Wine was considered to be the most appropriate product to study, having performed poorly on previous labelling reviews; in the 2019 AHA review, only 34% of products displayed calorie information and none displayed full nutritional information, which obscures the amount of sugar in these products.[32] We also took into account where calorie and sugar information may have the most impact. It would be particularly helpful for people who are trying to follow a healthy diet or attempt diet plans, who are most frequently women.[33] Around 7 in 10 bottles of wine sold in UK supermarkets are bought by women.[34]

This study was also an opportunity to check for progress in the labelling of health information more widely across specific products. In addition to investigating the extent to which the products provided nutritional information on pack, the study therefore also examined what, if any, health information was available on the wine labels, including the low risk drinking guidelines, health warnings, pregnancy warnings, and other warnings such as drink driving and age warnings.

This review also sought to establish the extent to which information was available to consumers online, to replicate the information available to people shopping online where reference to on-container labels would not be accessible. People in the UK are buying alcohol online more than ever before,[35] particularly in light of the COVID-19 pandemic and related restrictions,[36] making it even more important for information to be easily accessible at the online point of sale. The alcohol industry frequently points to websites as a key source of information for consumers as an alternative to labelling. This study therefore also aimed to examine whether information is truly available on websites.

2.2 Research Questions

This study aimed to answer the following research questions:

- What is the calorie and sugar content of branded wine?
- To what extent does the calorie and sugar content of branded wine vary between products of the same type and between different types?
- To what extent are branded wines providing nutritional content information on their product labels?

- To what extent are branded wines providing other information, such as the drinking guidelines, health warnings, ingredients, age warnings, pregnancy warnings and drink-driving warnings on labels?
- To what extent are branded wines providing nutritional content information online?

2.3 Product selection

In order to select the wines for analysis, the top ten UK wine brands were identified through Nielsen data published in The Grocer.[37] The data was from NielsenIQ's ScanTrack service, which monitors weekly sales from a nationwide network of EPoS checkout scanners. Coverage is taken from grocery multiples, co-ops, multiple off-licences, multiple forecourts, convenience multiples and symbols. The data was for the moving annual total to 15 May 2021.

The top ten wine brands, with their rank of all alcohol brands in brackets, included for the analysis were:

1. Hardy's (9)
2. Barefoot (11)
3. Yellow Tail (13)
4. McGuigan (19)
5. Casillero Del Diablo (20)
6. Blossom Hill (29)
7. I Heart (31)
8. Campo Viejo (32)
9. Isla Negra (33)
10. Echo Falls (35)

To identify the range of products available to purchase, a search was conducted on the Tesco website on 29/9/21. A list was made of the types of wine available for each brand, from the following list:

- Red
- White
- Rosé
- Fruit wine
- Sparkling wine
- Alcohol-free wine

Where brands had multiple products within a category of wine, one product was selected for analysis. The available products were cross-referenced with the products reviewed in the 2019 AHA audit. Products were selected primarily based on whether they were included in the 2019 audit, and if there was a miniature version available to keep costs low. Otherwise, the first of each type of product was selected. The cheapest product was priced at £3.75 and the most expensive was £8.50 (£10 if no promotions were applied); all prices apply to 750ml bottle.

A total of 31 wines were available across the 10 brands (ranging from 2 to 4 categories of wine for each brand). Thirty products were sent for sugar and nutritional analysis; the one non-alcoholic product was not sent for analysis as nutritional information is legally required on such product labels. Five products had been included in the 2019 labelling audit, highlighted in blue in the table below. A full list of products sent for analysis is available in Appendix A.

Brand	Red	White	Rosé	Fruit (higher ABV)	Fruit (lower ABV)	Sparkling	Alcohol Free	Total
Hardy's	1	1	0	0	0	0	1	**3**
Barefoot	1	1	1	0	0	1	0	**4**
Yellow Tail	1	1	1	0	0	1	0	**4**
McGuigan	1	1	0	0	0	0	0	**2**
Casillero Del Diablo	1	1	0	0	0	0	0	**2**
Blossom Hill	1	1	1	1	0	0	0	**4**
I Heart	1	1	1	0	0	1	0	**4**
Campo Viejo	1	1	0	0	0	0	0	**2**
Isla Negra	1	1	1	0	0	0	0	**3**
Echo Falls	0	0	0	1	1	1	0	**3**
Total	**9**	**9**	**5**	**2**	**1**	**4**	**1**	**31 (30 to analyse)**

Table 1. Wines identified by brand and type.

2.4 Methodology

There were three separate studies undertaken for the selected wines:

1. Nutritional analysis
2. Labelling analysis
3. Website analysis

The aim was to present an overall picture of the wines' nutritional values, alongside the information available to consumers at the point of sale through their labels and online.

2.4.1 Nutritional content

A nutritional analysis was undertaken to answer the first two research questions:

- What is the calorie and sugar content of branded wine?
- To what extent does the calorie and sugar content of branded wine vary between products of the same type and between different types?

Products were purchased and sent unopened to an independent laboratory,[1] which provided nutritional results based on the following measures:

- Estimate of container size (ml)
- Energy in Kcal per 100ml
- Energy in Kjoules per 100ml
- Sugars in g per 100g (and sub-sets of sugars)
- Declared alcohol by % ABV
- Found alcohol by % ABV
- Density in g per ml
- Energy in full container (kcal)
- Sugar in full container (g)

The lab analysed the sugar and calorie content of the wines, and additional calculations were made for teaspoons of sugar. A standard bottle of wine is 750ml. Many bottles suggest the recommended

[1] Kent Scientific Services, 8 Abbey Wood Road, Kings Hill, Kent, ME19 4YT.

serving size to be 125ml, equating to six glasses of wine per bottle. However, it is commonplace for on-sales premises to provide 175ml as their standard size, and a large glass to be 250ml.

While the lab provided the calculations on the basis of the full container (bottle size), these calculations are provided below per 125ml, 175ml, 250ml, and 750ml, rounded to 1 decimal place in line with nutritional reporting guidelines.[38]

For the purposes of this report, an additional calculation of grams of sugar per 100ml was calculated by the authors by multiplying the grams of sugar per 100g by the density. This was then used to calculate the grams of sugar in different volumes of drinks. In order to ensure accuracy, a spot-check of these figures was undertaken by the laboratory.

The number of teaspoons of sugar was also calculated using the calculation that 1 teaspoon equates to 4g of sugar.

2.4.2 Labelling information

A labelling analysis was undertaken to answer the third and fourth research questions:

- To what extent are branded wines providing nutritional content information on their product labels?
- To what extent are branded wines providing other information, such as the drinking guidelines, health warnings, ingredients, age warnings, pregnancy warnings and drink-driving warnings on labels?

Prior to delivery to the lab, pictures were taken of the front and back labels of the products. Labels were analysed for their inclusion of the following information:

- CMOs' low risk drinking guidelines
- Unit information
- Ingredients
- Nutritional information and calories
- Health warnings
- Pregnancy warnings
- Other warnings (driving and age)

Where a product also featured in the 2019 labelling review conducted by the AHA,[39] the results were compared to test for changes over time.

One alcohol-free wine was included to compare the ingredients and nutritional information available on the label against the alcoholic version of the same product.

2.4.3 Website information

A website analysis was undertaken between October and November 2021 to answer the fifth research question:

- To what extent are branded wines providing nutritional content information online?

Nutritional information for each of the 30 sampled products were searched for on 16 major retailers and on each of the brand and brand owners' websites. Five of the retailers did not stock any of the sampled products and so were excluded from the analysis. A full list of websites searched is available in Appendix C, as well as a list of the information available online for each sampled product.

3. Results

3.1 Nutritional Analysis

The results of the nutritional analysis are presented below, in relation to sugar and calorie content. Average content is provided for each type of wine, per different serving sizes of 125ml (small glass), 175ml (medium glass), 250ml (large glass) and 750ml (standard bottle). The range in sugar and calorie content is also provided for each type of wine, for the smallest and largest serving sizes of 125ml and 750ml. The nutritional analysis of each individual product is contained in Appendix B.

3.1.1 Sugar Content

Category Type	g/125ml	g/175ml	g/250ml	g/750ml
Fruit	5.5	7.8	11.1	33.2
Sparkling	5	7	10	30
Rosé	2.9	4.1	5.9	17.7
Red	0.8	1.1	1.5	4.5
White	0.7	1.1	1.5	4.4

Table 2. Average grams of sugar across wine types per 125ml, 175ml, 250ml, 750ml.

The analysis shows the variation in the average amounts of sugar per category of wine, presented in *Table 2* above. The rosé, sparkling and fruit wine categories had significantly higher amounts of sugar than the white or red wine categories. People drinking a 125ml glass of fruit wine would be consuming an average of 5.5g (1.4 teaspoons) of sugar, more than a sixth of their recommended sugar allowance of 30g per day. People drinking a 125ml glass of rosé would be consuming on average 3g of sugar, or 10% of their daily allowance. By contrast, people drinking red or white wine would on average be consuming 0.8 and 0.7 grams of sugar respectively, per 125ml glass. The wine with the most sugar was a sparkling wine at 9.8g of sugar per 125ml (see table 3 below).

This difference is emphasised when looking at consumption in greater quantities. For example, a 750ml bottle of fruit wine would provide an average of 33.2 grams of sugar, over seven times more sugar than a bottle of white wine, which provides an average of only 4.4 grams.

In addition to the very different average sugars found across each category of wine, huge variation was also found within each category. Depending on the product chosen within each category, a person could be consuming hugely different amounts of sugar, as demonstrated in *Table 3* below. The largest variation was in rose wine, with a difference of 7.1g (2 teaspoons) of sugar per 125ml, and the smallest variation was found for red wine, with a difference of 1.6g of sugar per 125ml between the product with the most sugar and the product with the least sugar. This means that even for red wine with the smallest variation between products surveyed, by choosing one brand over another, someone could be consuming almost 10 grams of sugar more if they drank a full bottle, increasing to a substantial 42.6g of sugar for rose wine.

Category	Least Sugar (g)/125ml	Most Sugar (g)/125ml	Range (g)/125ml
Rosé	0.9	8	7.1
Sparkling	1.8	9.8	4.9
Fruit	4.2	6.5	2.3
White	0	1.7	1.7
Red	0	1.6	1.6

Table 3. Least and most grams of sugar in 125ml glasses of different wine types.

3.1.2 Calorie Content

The calorie content of wine is impacted by both the sugar content (4 calories per gram of sugar)[40] and alcohol content (7 calories per gram of alcohol).[41] Again, there was variation across categories, with red wine containing most calories, averaging 93.2 calories per 125ml glass. The most calorific wine was a red wine with 99.8 calories per 125ml, or 599 calories per 750ml bottle. This is due to red wines having higher alcohol content. The fruit wines, despite being higher in sugar, had fewer calories due to their lower alcohol content. A 125ml glass of fruit wine had on average 67.8 calories.

Category Type	kcal/125ml	kcal/175ml	kcal/250ml	kcal/750ml
Red	93.2	130.5	186.5	559.4
White	87.7	122.7	175.3	525.9
Rosé	86.9	121.6	173.7	521.2
Sparkling	83.8	117.3	167.6	502.8
Fruit	67.8	94.9	135.6	406.7

Table 4. Average calories across wine types per 125ml, 175ml, 250ml, 750ml.

As with sugars, there was variation within categories. Depending on the product chosen within each category, a person could be consuming hugely different amounts of calories, as demonstrated in *Table 5* below. For example, consumers drinking 125ml of a fruit wine could be consuming 34.1 more calories if they opt for one brand over another. This adds up to around 205 calories more for a full 750ml bottle.

Category	Least Calories kcal/125ml	Most Calories kcal/125ml	Range kcal/125ml
Fruit	54.1	88.25	34.1
Sparkling	64.4	98	33.6
Rosé	76.8	94	17.3
Red	84.9	99.8	14.9
White	83.5	93.5	10

Table 5. Least and most calories in 125ml glasses of different wine types.

3.2 Labelling Analysis

3.2.1. Nutritional Information and Calories

All alcoholic drinks above 1.2% ABV are exempt from mandatory nutrition labelling, but they can voluntarily carry an energy declaration without the need to provide full nutritional information.[42] Manufacturers can display calorie information per serving, as long as the information is given in addition to the mandatory per 100ml information.[43]

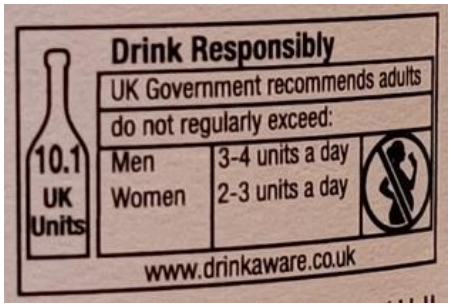

Figure 1.

None of the labels displayed full nutritional information, which is where sugar information would be found (unless provided separately). Six (20%) of the wines provided calorie content; of these, four (13% of the total) provided calorie information per 100ml and per 125ml serving. However, two (7%) of the labels displayed calorie information only per 125ml serving. There was no clear pattern as to which products did or did not display information.

Of the remaining 24 (80%) that did not include any nutritional or calorie information, 3 products referred to a brand website for this information, as in *Figure 2*.

Figure 2. Example of label directing to a website for calorie information.

Differences were found in the level of nutrition information provided across products by the same brand, with some providing this on-pack and others directing people to a website. For example, of four products belonging to one brand, three directed people to a website for calorie information, while the other provided no reference to calorie information.

A comparison was made between the alcoholic and non-alcoholic version of one wine. As seen below in *Figure 3*, the non-alcoholic wine provided full nutritional information, as required by law, whereas the alcoholic wine provided only calorie information, on a voluntary basis.

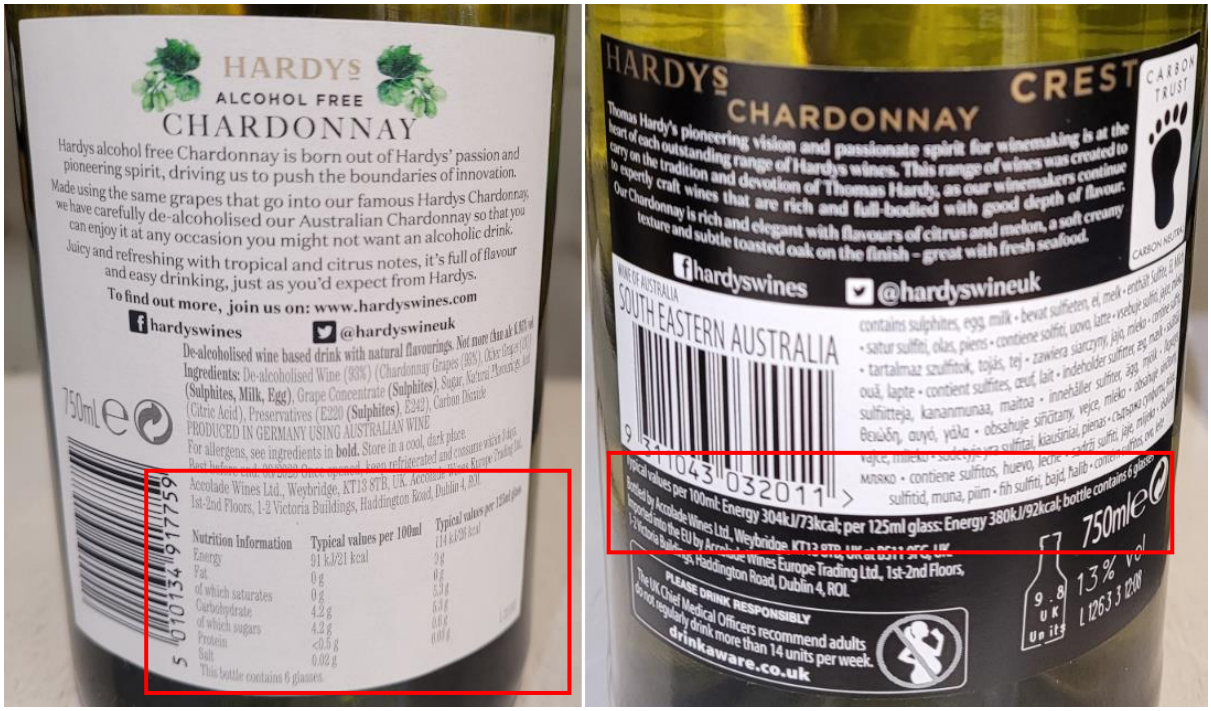

Figure 3. Side-by-side comparison of Hardy's alcohol-free and alcoholic Chardonnay.

The nutritional content featured on labels were checked for accuracy against the results of the nutritional analysis. All were within the mandatory plus or minus 20% tolerance range.[44]

3.2.2 CMOs' low risk drinking guidelines

The Chief Medical Officers' (CMOs') current low risk drinking guidelines for regular drinkers of a maximum 14 units per week were present on 25 (83%) of the wine bottles. Of the remaining bottles, 2 (7%) displayed the pre-2016 guidelines (see Figure 1), and 3 (10%) displayed no drinking guidelines.

Of the five products which had no reference to the CMO guidelines or contained the old guidelines, four (13% of total) contained some form of responsible drinking statement (see Figure 4). One label with no low risk drinking guidelines referred to the Drinkaware website (see Figure 5).

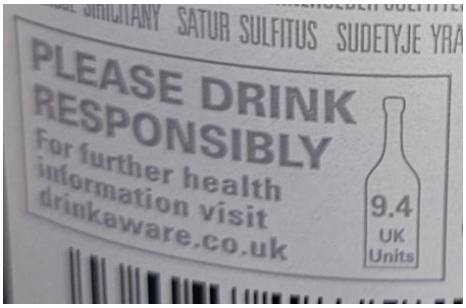

Figure 4.

Figure 5.

The extent to which the guidelines featured on products varied, even amongst those of the same brand. One brand provided the correct drinking guidelines on three of its four products, while the fourth product did not feature any guidelines. Another brand had the correct guidelines for two of its products analysed and no guidelines on the other two.

3.2.3 Unit Information

The number of alcohol units per container was present on all product labels. The unit content per serving, as well as the serving measurement, was listed on 15 (50%) of labels, all of which gave a serving size of 125ml. No labels provided the unit content as a proportion of the drinking guidelines, for example by stating the number of units per 125ml glass as a percentage of the 14 units per week. This has been recommended as the best way to present this information to aid understanding and accuracy of tracking unit consumption.[45]

3.2.4 Ingredients

None of the labels displayed a full list of ingredients. All listed the most common allergens, as required by law.

A side-by-side comparison of the alcohol free and alcoholic version of the same wine shows a difference in approach to the labelling of ingredients. A full ingredient listing was provided on the alcohol-free version, but only the most common allergens on the alcoholic version – the minimum requirements by law. [46]

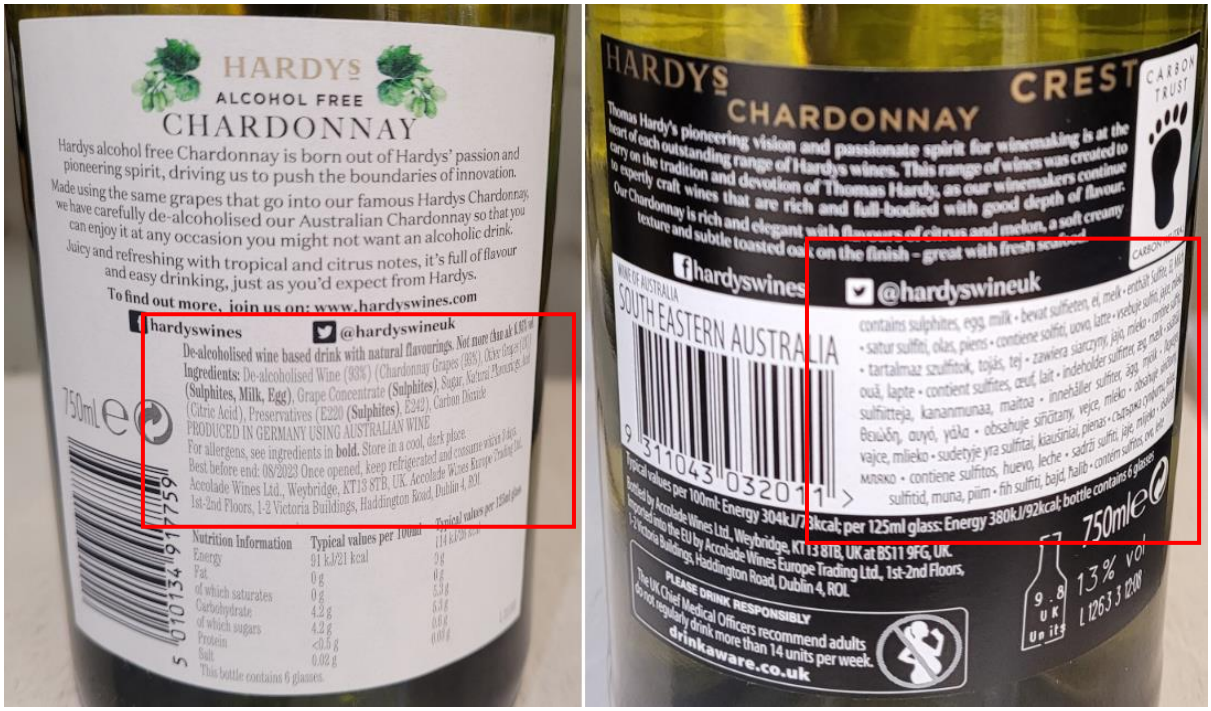

Figure 6. Side-by-side comparison of Hardy's alcohol-free and alcoholic Chardonnay.

3.2.5 Health Warnings

None of the labels displayed a health warning. Directions to a website for health information featured on 26 (86%) of the labels; 24 of these signposted to Drinkaware, while 2 signposted to the European wineinmoderation.eu. A statement advising 'responsible drinking' was displayed on 20 (67%) of labels.

3.2.6 Pregnancy warnings

All the labels provided a pregnancy warning in symbol format. None provided text information, such as "avoid alcohol if pregnant or trying to conceive" or the CMO's advice of phrases such as "it is safest not to drink alcohol when pregnant".[47]

3.2.7 Other warnings

Two (7%) labels presented a warning against drink-driving and two (7%) an age (under 18) warning in symbol format. Of four products from the same brand, two provided a drink driving warning and an age limit, whereas the other two did not. Additionally, two provided some form of responsibility statement while the other two did not.

3.2.8 Miniatures

Ten miniature bottles and cans were included within the study. The information provided on the miniatures mostly matched the information on the 750ml bottles.

In 4 cases, the miniatures provided less information than the 750ml bottles. For those four miniature products, the following information was missing compared to their full-size equivalent:

- Drinking guidelines on three of the four products
- Unit content of container on two of the four products, which were an 187ml can and an 187ml bottle
- Calories present on one of the four
- Responsible drinking statement on one of the four products
- Website reference on one of the four

There was variation across brands. Of one brand's three miniatures examined, one miniature provided some information that was not available on the 750ml version. The 187ml miniature displayed the following information, while the 750ml bottle did not:

- Current low risk drinking guidelines
- Unit content (per 125ml serving)
- Drink drive warning
- Age warning

3.2.9 Legibility

The 2019 survey of alcohol labelling asked data collectors to include a measurement scale in the photographs, allowing data coders to measure the size of text and logos. Although a similar comparison was not undertaken in 2021, it was noted that certain wine labels were difficult to read. For example, the information presented on the back of some labels used a grey font on a white background, as in *Figure 7* below. Other wines used smaller text sizes for the health information in comparison to the description of the wine, as in *Figure 8* below.

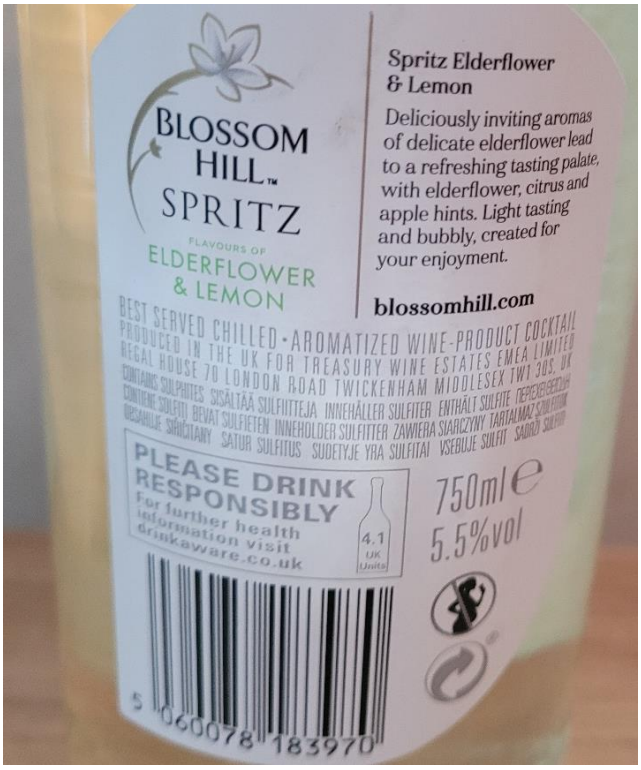

Figure 7. Example of grey font on white background.

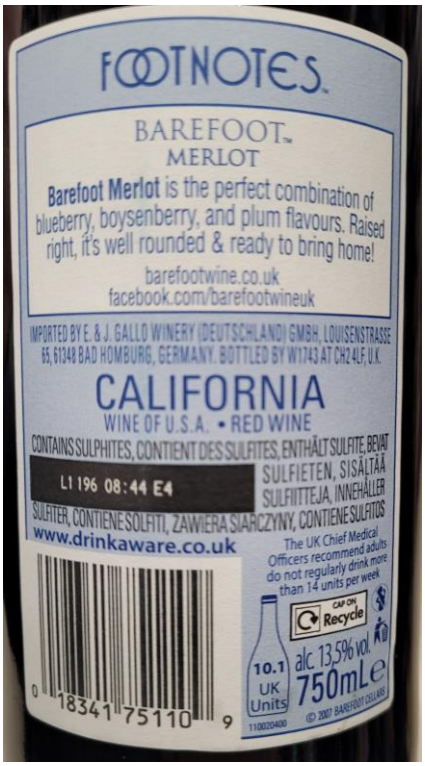

Figure 8. Example of health information in smaller text

3.2.10 Comparison to 2019 Survey

Five products surveyed in 2019 were also surveyed in 2021. These are Barefoot Merlot, Barefoot Bubbly Pink Moscato, Blossom Hill White Zinfandel, Campo Viejo Rioja Tempranillo, and Yellow Tail Pinot Grigio. Their 2021 labels were compared with the 2019 findings for any changes or improvements, presented below in *Table 6.*

		Barefoot Merlot	Barefoot Bubbly Pink Moscato	Blossom Hill White Zinfandel	Campo Viejo Rioja Tempranillo	Yellow Tail Pinot Grigio
CMO low-risk drinking guidelines	**2019**	2 current, 2 old[2]	Old guidelines	Link to Drinkaware only	Link to Drinkaware only	Link to Drinkaware only
	2021	Link to Drinkaware only	Current guidelines	Current guidelines	Current guidelines	Current guidelines
Unit content per serving	**2019**	No	No	No	No	No
	2021	No	No	No	No	No
Calorie Content	**2019**	No	No	No	No	No
	2021	No	No	Link to website	Yes	No
Ingredients	**2019**	No	No	No	No	No
	2021	No	No	No	No	No
Pregnancy warning (image format)	**2019**	Yes	Yes	Yes	Yes	Yes
	2021	Yes	Yes	Yes	Yes	Yes
Drink drive warning	**2019**	No	No	No	No	No
	2021	No	No	Yes	No	No
Age (under 18) warning	**2019**	No	No	No	No	No
	2021	No	No	Yes	No	No

Table 6. Comparison of five products present in 2019 and 2021 labelling analysis.

As *Table 6* shows, four of the five products have improved the provision of information relating to the CMO guidelines, shifting from incorrect information or links to a website, to providing the current guidelines; the fifth product now signposts to a website where previously the bottles provided guidelines information.

However, there was little to no progress in relation to the other types of information. In 2019 and 2021, none of the products displayed the unit content per serving or provided a list of ingredients. In 2021, one product displayed the calorie content, while another linked to a website where this information could be obtained. All products displayed pregnancy warnings in image format in 2019 and 2021. In 2019, none of the five products displayed drink drive or age warnings, whereas in 2021 this had been added to one label.

3.3 Website Analysis

The analysis showed that nutritional content of the products reviewed were available online for only a few brands and products. Overall, information was located for only 9 of the 30 products, across 4

[2] The 2019 analysis surveyed multiple products purchased from different locations. Four Barefoot Merlots were purchased, two of which displayed the old guidelines.

brands. Six of the brands had no information available to consumers, either on their own websites or on retailers' websites.

The website analysis found there was no standard within or between websites in how much information was provided, meaning consumers had no way of knowing if they would be able to find the information they were looking for.

3.3.1 Retailer web pages

The information displayed across supermarket websites was inconsistent. Only 5 of the 30 products had calorie information on at least one retailer website.

One product page on a retailer website displayed an image of the back label of the wine bottle. While the label itself did not contain any nutrition information, it ensured that online customers received the same information that they would were they shopping in person.

Retailers provided different levels of detail for different products, such as listing calories for some wines but not others. One retailer listed calories for one brand but not for another. One retailer product page contained a link to calorie information on an external site, which was the brand owner website. Only 7 of the 11 retailers provided information for at least one product reviewed. This information was again concentrated on the same 5 products, meaning 25 products had no information available on retailer webpages.

Supermarkets did not take responsibility for the information on their websites, rather posting disclaimers and referring consumers to manufacturers. A list of disclaimers is available in Appendix C. Only one brand's listings on a retailer's site provided a specific link for calorie information, as discussed above: "For calorie information see www.blossomhill.com/calories". This URL redirected to the manufacturer's website where they provided calorie information for all their brands. This information was not provided on the brand site.

In one case, incorrect information was provided. In a listing for a wine on Amazon, the product description included the ingredients maize and hops, as if it were a beer. When the product company was contacted, they confirmed that this was incorrect.

3.3.2 Brand web pages

Only one of the brand websites provided nutritional information on their product websites. Located as a PDF in the FAQ section of their website, rather than on the product pages, the information was not easy to find, but it was complete.[48] This information was not available on any retailer websites.

Of the nine brand owners' websites examined, only one provided calorie information on all its brands. The website includes a statement by the manufacturer:

"[Brand owner] is committed to providing calorie information about our wines to help consumers make more informed choices. We will be providing calorie information for our wines from Vintage 2016. This initiative is in line with [Brand owner]'s Corporate Responsibility strategy - a key strategic priority is advancing alcohol education and encouraging the responsible consumption of wine."[49]

Consumers were required to select the product they are interested in from a series of drop-down menus. Attempts were made to search for the relevant products using the drop-down menus. It was unclear whether the three products on the website were properly represented; for two products the names on the bottles did not match what was listed on the website, and the third product had two options for what it could have been. This is likely to cause people confusion should they be looking for this information. Additionally, the calories provided were in 100ml and 150ml servings, although the recommended serving size on the bottles was 125ml.

Inconsistent or no information was found on the other brand owners' websites. One brand's website stated that its calorie information section was 'undergoing maintenance'. Another brand owner put out a press release in 2017 which stated that all their brands' websites would feature nutrition information by the end of that year. However, on one of the brand owner's product websites this information was not available. One other brand owner website did provide nutritional information for some, but not all, of its brands.

4. Discussion

4.1 Nutritional content of wine

This study builds on previous research undertaken by Action on Sugar[50] on ready-to-drink products, finding similar results in terms of often high sugar and calorie content. For example, one 125ml glass of a red wine surveyed contained 100 calories. Similarly, one 125ml glass of a particular sparkling wine could provide nearly a third of a person's recommended daily sugar allowance.

As with the ready-to-drink products analysed previously with Action on Sugar, the average amount of sugar and calories found in the wines in this study varied widely. Fruit wines contained, on average, almost 8 times as much sugar than white wine, and red wines had on average almost 40% more calories than fruit wines. There was also huge variation found within each category. For example, opting for 125ml of one rosé wine over another could mean drinking 2 more teaspoons of sugar, while opting for 125ml of one fruit wine over another could mean consuming 60% more calories.

The nutritional analysis presented within this report has been based on a serving size of 125ml, as recommended on the bottles. However, in practice, 175ml is often the standard measure provided in licensed premises, and research has shown that people often pour themselves significantly larger measures.[51] The results presented within this report should therefore be caveated by the likelihood that people are drinking measures larger than 125ml which can have a significant impact on calories consumed over a drinking occasion or a period of time.

This study clearly shows not only the significant contribution that alcohol could make to the calorie and sugar intake of adults who drink wine, but also the wide variation in nutritional content of this product. This makes it difficult for drinkers to understand how many calories or how much sugar they are consuming at any one time, and how their alcohol consumption is contributing to their overall diet. With nearly 10% of the daily calorie intake of an adult who drinks deriving from alcohol,[52] [53] and alcohol a risk factor for obesity for some people,[54] it is essential that people are provided with the information on the nutritional content of their drinks so they can choose what, and how much, they drink.

4.2 Access to information

In line with previous research, this study demonstrates that letting alcohol producers decide what information to include on their products results in poor and inconsistent practice.[55] [56] Only six (20%) of the wines provided calorie content, with just four (13%) also providing this per serving. This is problematic and explains why people consistently lack awareness of the calories in alcoholic drinks.[57] [58] Unless complete information is easily accessible, people will remain unaware of what they are drinking, restricting their right to information. We all have a right to know what is in our drinks, but this could be particularly important for some parts of the population, such as people with Type 1 or Type 2 diabetes, as well as people trying to make health-conscious decisions. This information should be provided for both portion and container sizes. Otherwise, the nutritional content of alcohol products remains invisible, constituting a hidden danger to our health.

Even basic information such as the current low-risk drinking guidelines of a maximum 14 units per week were not present on 17% of the labels, and there was no mention of further guidance such as spreading one's drinking over a few days and having drink-free days in a given week. Although all the bottle labels presented the unit content per container, only 50% provided the unit content per serving, stated to be 125ml. None of the labels presented the container's unit content as a proportion of the guidelines, which has been found to be the most effective way to present this information.[59] All the labels provided a pregnancy warning in symbol form, and only two (7%) of labels presented a warning against drink-driving and two (7%) an age (under 18) warning in symbol format. Health warnings have been shown to improve consumer knowledge and impact behaviour, reducing alcohol harms.[60] [61]

Additionally, our research provides new insight on the provision of online information, which the industry promotes as a viable means of providing consumer information instead of providing information on labels. However, this study suggests that even if people tried to look online, they would not be able to find the information they need. Only 5 products had any calorie information on retailer websites and this was not provided by all retailers who sold this product. The information accessed would therefore depend on the supermarket used. Retailers also provided information for some brands but not others. In addition, no nutritional or sugar information was available for 9 out of 10 (90%) brands and 26 of 30 (87%) of products. Of the 9 (30%) products with calorie information available online, only 4 (13%) had calorie information provided on the brand website. In fact, these four products belonged to one brand.

Therefore, despite what the industry proposes, websites are not currently a viable solution or route for consumer information, nor should they be regarded as an appropriate alternative to information at the point of purchase. Additionally, studies have shown that it is rare for people to look online for alcohol-related health information.[62 63] According to the WHO, "Websites have a major disadvantage as a source of consumer information in that they are dissociated from the immediate points of sale and consumption."[64] Even if the information were available online, people would be unlikely to access it unless they were shopping online, necessitating labelling on the products themselves.

Our analysis of both the wine labels and the supermarket and producer websites demonstrates that the type and level of information available to people depends on what product they buy, whether they buy it in store or online, and which retailer they buy it from. Alcohol producers should be transparent and consistent in their provision of nutritional and health information on product packaging and websites. This is vital to allow people to make informed decisions, particularly where there is such wide variation between similar products, and to realise the public's right to know what is in their drink.

Indeed, research demonstrates that the public want this information on labels. In the UK, 75% of people want the number of units in a product to be displayed on alcohol labels as a legal requirement, 61% want calorie information, and 53% want the amount of sugar in grams.[65]

5. Recommendations

Building on previous research by Action on Sugar and the Alcohol Health Alliance,[66] [67] this study has revealed that despite variable and often high nutritional content of wine, the calorie and sugar content of these products is rarely provided on products or on websites. There is huge variation in the information people can access depending on the products people buy and where they shop from. The current voluntary system of alcohol labelling and information provision is woefully inadequate, leaving people without enough information to make fully educated choices about what they are drinking.

Alcohol Focus Scotland, Alcohol Change UK, the Alcohol Health Alliance UK (AHA), and Action on Sugar recommend that in the interest of public health and consumer rights, the UK and devolved governments should use their powers to:

1) **Mandate, monitor, and enforce the provision of health information on alcohol packaging.**

The industry should be required to provide information on the risks of consuming alcohol, as well as unit content, the low risk drinking guidelines, a pregnancy warning in graphic and text form, and nutrition and ingredients listings on all alcohol packaging.

2) **Specify the content and design of information in regulations, informed by consumer research, and developed free from industry influence.**

In line with the World Health Organization's recommendation,[68] the content and design of health information should be specified. As has been the case with health warnings on tobacco products, consumer testing is needed to inform the content and design of health information to maximise impact. This must be developed free from industry influence.

Appendix A: Sampled products

Brand	Product
Barefoot	Bubbly Pink Moscato
Barefoot	Merlot
Barefoot	Pink Moscato
Barefoot	Pinot Grigio
Blossom Hill	Crisp and fruity
Blossom Hill	Soft and Fruity
Blossom Hill	Spritz Elderflower and Lemon
Blossom Hill	White Zinfandel
Campo Viejo	Blanco Rioja
Campo Viejo	Rioja Tempranillo
Casillero Del Diablo	Cabernet Sauvignon
Casillero Del Diablo	Sauvignon Blanc
Echo Falls	Fruit Fusion Summer Berries (5.5%)
Echo Falls	Fruit Fusion Summer Berries (9%)
Echo Falls	Sparkling Summer Berries
Hardy's	Crest Chardonnay
Hardy's	Stamp Shiraz Cabernet
I Heart	Pinot Grigio
I Heart	Pinot Noir
I Heart	Prosecco
I Heart	Rosé
Isla Negra	Merlot
Isla Negra	Rosé
Isla Negra	Sauvignon Blanc Px
McGuigan	Reserve Cabernet Sauvignon
McGuigan	Reserve Chardonnay
Yellow Tail	Pinot Grigio
Yellow Tail	Rosé
Yellow Tail	Shiraz
Yellow Tail	Sparkling Rosé

Appendix B: Nutritional Analysis

1. Sugar Content

Wine Name	Wine Type	ABV	per 125ml	per 175ml	per 250ml	per 750ml
Barefoot Bubbly Pink Moscato	Sparkling wine	8.0	9.95	13.93	19.90	59.69
Barefoot Merlot	Red wine	13.5	1.12	1.57	2.24	6.72
Barefoot Pink Moscato	Rosé wine	9.0	8.42	11.78	16.83	50.50
Barefoot Pinot Grigio	White wine	12.0	0.73	1.02	1.46	4.38
Blossom Hill Crisp and fruity	White wine	12.0	1.17	1.64	2.34	7.03
Blossom Hill Soft and Fruity	Red wine	12.5	1.56	2.18	3.11	9.34
Blossom Hill Spritz Elderflower and Lemon	Fruit wine	5.5	4.18	5.86	8.37	25.10

Blossom Hill White Zinfandel	Rosé wine	8.5	3.77	5.28	7.54	22.63
Campo Viejo Blanco Rioja	White wine	12.5	0	0	0	0
Campo Viejo Rioja Tempranillo	Red wine	13.5	0	0	0	0
Casillero Del Diablo Cabernet Sauvignon	Red wine	13.5	0	0	0	0
Casillero Del Diablo Sauvignon Blanc	White wine	13.0	0.29	0.41	0.58	1.75
Echo Falls Fruit Fusion Summer Berries (5.5%)	Fruit wine	5.5	5.85	8.20	11.71	35.13
Echo Falls Fruit Fusion Summer Berries (9%)	Fruit wine	9.0	6.47	9.06	12.94	38.83
Echo Falls Sparkling Summer Berries	Sparkling wine	5.5	6.08	8.51	12.15	36.45
Hardy's Crest Chardonnay	White wine	13.0	0.59	0.83	1.18	3.54
Hardy's Stamp Shiraz Cabernet	Red wine	13.5	0.97	1.35	1.93	5.79
I Heart Pinot Grigio	White wine	12.0	0.71	1.00	1.42	4.27
I Heart Pinot Noir	Red wine	12.0	0.94	1.31	1.88	5.63
I Heart Prosecco	Sparkling wine	11.0	1.76	2.46	3.52	10.55
I Heart Rosé	Rosé wine	12.0	0.83	1.16	1.65	4.96
Isla Negra Merlot	Red wine	12.0	0.39	0.54	0.77	2.32
Isla Negra Rosé	Rosé wine	12.0	0.94	1.31	1.87	5.61
Isla Negra Sauvignon Blanc Px	White wine	11.5	0.48	0.68	0.97	2.90
McGuigan Reserve Cabernet Sauvignon	Red wine	13.0	0.60	0.84	1.20	3.60
McGuigan Reserve Chardonnay	White wine	12.5	0.71	1.00	1.42	4.27
Yellow Tail Pinot Grigio	White wine	11.5	1.71	2.39	3.41	10.24
Yellow Tail Rosé	Rosé wine	12.0	1.08	1.51	2.16	6.48
Yellow Tail Shiraz	Red wine	13.5	1.04	1.46	2.08	6.25
Yellow Tail Sparkling Rosé	Sparkling wine	11.5	2.19	3.07	4.38	13.14

2. Teaspoons of Sugar

Wine Name	Wine Type	ABV	per 125ml	per 175ml	per 250ml	per 750ml
Barefoot Bubbly Pink Moscato	Sparkling wine	8.0	2.49	3.48	4.97	14.92
Barefoot Merlot	Red wine	13.5	0.28	0.39	0.56	1.68
Barefoot Pink Moscato	Rosé wine	9.0	2.1	2.95	4.21	12.63
Barefoot Pinot Grigio	White wine	12.0	0.18	0.26	0.37	1.1
Blossom Hill Crisp and fruity	White wine	12.0	0.29	0.41	0.59	1.76
Blossom Hill Soft and Fruity	Red wine	12.5	0.39	0.54	0.78	2.33

Blossom Hill Spritz Elderflower and Lemon	Fruit wine	5.5	1.05	1.46	2.09	6.27
Blossom Hill White Zinfandel	Rosé wine	8.5	0.94	1.32	1.89	5.66
Campo Viejo Blanco Rioja	White wine	12.5	0	0	0	0
Campo Viejo Rioja Tempranillo	Red wine	13.5	0	0	0	0
Casillero Del Diablo Cabernet Sauvignon	Red wine	13.5	0	0	0	0
Casillero Del Diablo Sauvignon Blanc	White wine	13.0	0.07	0.1	0.15	0.44
Echo Falls Fruit Fusion Summer Berries (5.5%)	Fruit wine	5.5	1.46	2.05	2.93	8.78
Echo Falls Fruit Fusion Summer Berries (9%)	Fruit wine	9.0	1.62	2.26	3.24	9.71
Echo Falls Sparkling Summer Berries	Sparkling wine	5.5	1.52	2.13	3.04	9.11
Hardy's Crest Chardonnay	White wine	13.0	0.15	0.21	0.29	0.88
Hardy's Stamp Shiraz Cabernet	Red wine	13.5	0.24	0.34	0.48	1.45
I Heart Pinot Grigio	White wine	12.0	0.18	0.25	0.36	1.07
I Heart Pinot Noir	Red wine	12.0	0.23	0.33	0.47	1.41
I Heart Prosecco	Sparkling wine	11.0	0.44	0.62	0.88	2.64
I Heart Rosé	Rosé wine	12.0	0.21	0.29	0.41	1.24
Isla Negra Merlot	Red wine	12.0	0.1	0.14	0.19	0.58
Isla Negra Rosé	Rosé wine	12.0	0.23	0.33	0.47	1.4
Isla Negra Sauvignon Blanc Px	White wine	11.5	0.12	0.17	0.24	0.73
McGuigan Reserve Cabernet Sauvignon	Red wine	13.0	0.15	0.21	0.3	0.9
McGuigan Reserve Chardonnay	White wine	12.5	0.18	0.25	0.36	1.07
Yellow Tail Pinot Grigio	White wine	11.5	0.43	0.6	0.85	2.56
Yellow Tail Rosé	Rosé wine	12.0	0.27	0.38	0.54	1.62
Yellow Tail Shiraz	Red wine	13.5	0.26	0.36	0.52	1.56
Yellow Tail Sparkling Rosé	Sparkling wine	11.5	0.55	0.77	1.1	3.29

3. Calorie Content

Wine Name	Wine Type	ABV	per 125ml	per 175ml	per 250ml	per 750ml
Barefoot Bubbly Pink Moscato	Sparkling wine	8.0	98	137.2	196	588
Barefoot Merlot	Red wine	13.5	89.57	125.4	179.14	537.43
Barefoot Pink Moscato	Rosé wine	9.0	94	131.6	188	564
Barefoot Pinot Grigio	White wine	12.0	88	123.2	176	528
Blossom Hill Crisp and fruity	White wine	12.0	86.23	120.72	172.46	517.38

Blossom Hill Soft and Fruity	Red wine	12.5	93.58	131.02	187.17	561.5
Blossom Hill Spritz Elderflower and Lemon	Fruit wine	5.5	54.17	75.83	108.33	325
Blossom Hill White Zinfandel	Rosé wine	8.5	76.87	107.62	153.74	461.23
Campo Viejo Blanco Rioja	White wine	12.5	86.83	121.57	173.67	521
Campo Viejo Rioja Tempranillo	Red wine	13.5	94.25	131.95	188.5	565.51
Casillero Del Diablo Cabernet Sauvignon	Red wine	13.5	94.5	132.3	189	567
Casillero Del Diablo Sauvignon Blanc	White wine	13.0	89.67	125.53	179.33	538
Echo Falls Fruit Fusion Summer Berries (5.5%)	Fruit wine	5.5	60.83	85.17	121.67	365
Echo Falls Fruit Fusion Summer Berries (9%)	Fruit wine	9.0	88.33	123.67	176.67	530
Echo Falls Sparkling Summer Berries	Sparkling wine	5.5	64.33	90.07	128.67	386
Hardy's Crest Chardonnay	White wine	13.0	99.83	139.77	199.67	599
Hardy's Stamp Shiraz Cabernet	Red wine	13.5	93.58	131.02	187.17	561.5
I Heart Pinot Grigio	White wine	12.0	85	119	170	510
I Heart Pinot Noir	Red wine	12.0	88.83	124.37	177.67	533
I Heart Prosecco	Sparkling wine	11.0	83.17	116.43	166.33	499
I Heart Rosé	Rosé wine	12.0	86.17	120.63	172.33	517
Isla Negra Merlot	Red wine	12.0	84.83	118.77	169.67	509
Isla Negra Rosé	Rosé wine	12.0	86	120.4	172	516
Isla Negra Sauvignon Blanc Px	White wine	11.5	83.5	116.9	167	501
McGuigan Reserve Cabernet Sauvignon	Red wine	13.0	94.17	131.83	188.33	565
McGuigan Reserve Chardonnay	White wine	12.5	90.5	126.7	181	543
Yellow Tail Pinot Grigio	White wine	11.5	85.56	119.79	171.12	513.37
Yellow Tail Rosé	Rosé wine	12.0	91.33	127.87	182.67	548
Yellow Tail Shiraz	Red wine	13.5	99.6	139.44	199.2	597.59
Yellow Tail Sparkling Rosé	Sparkling wine	11.5	89.67	125.53	179.33	538

Appendix C: Website Analysis

1. Websites Checked

Retailer Websites	
Amazon	https://www.amazon.co.uk/
Asda	https://groceries.asda.com/
Coop	https://www.coop.co.uk/
Drink Supermarket	https://www.drinksupermarket.com/

Iceland	https://www.iceland.co.uk/
Majestic	https://www.majestic.co.uk/
Morrisons	https://groceries.morrisons.com/
Ocado	https://www.ocado.com/
Sainsburys	https://www.sainsburys.co.uk/
Tesco	https://www.tesco.com/
Waitrose	https://www.waitrose.com/

Naked Wines, Threshers, Oddbins, Lidl, and Aldi, were also checked but not represented in the analysis as none stocked any of the sampled products.

Brand Websites	
Barefoot	https://www.barefootwine.com/
Blossom Hill	https://www.blossomhill.com/en-gb
Campo Viejo	https://www.campoviejo.com/
Casillero Del Diablo	https://www.casillerodeldiablo.com/
Echo Falls	https://www.echofallswine.co.uk/
Hardy's	http://www.hardyswines.com/
I Heart	http://www.iheartwines.co.uk/
Isla Negra	https://www.islanegrawines.com/en/
McGuigan	https://www.mcguiganwines.co.uk/
Yellow Tail	https://www.yellowtailwine.com/

Brand Owners' Websites	
Accolade Wines	https://www.accoladewines.com/calories/
Australian Vintage Limited	https://www.australianvintage.com.au/
Casella Family Brands	https://www.casellafamilybrands.com/
Concha y Toro	https://conchaytoro.com/en/blog/wine-make-us-fat/
Cono Sur Vineyards and Winery	https://www.conosur.com/en/
E&J Gallo Winery	https://www.gallo.com/sitemap
Freixenet Copestick	https://www.freixenet.co.uk/The-Range/Nutritional-Information
Pernod Ricard	https://www.pernod-ricard.com/en/media/pernod-ricard-feature-nutritional-information-all-its-strategic-brands
Treasury Wine Estates	https://www.tweglobal.com/calories

2. Retailer disclaimer text

Retailer	**Text**
Amazon	"While we work to ensure that product information on our website is correct, manufacturers may alter their product information. Actual product packaging and materials may contain more and/or different information than shown on our website. If you have any specific product queries, please contact the manufacturer."
Asda	"At ASDA, we do everything we can to make sure the information about the products we sell is always as accurate as possible. However, because products are regularly improved, the product information, ingredients, nutritional guides and dietary or allergy advice may occasionally change. As a result, we recommend that you always read the label carefully before using or consuming any products. Please do not solely rely on the information provided on

	this website Because of this, ASDA is unable to accept liability for any inaccuracies or incorrect information contained on this site."
Coop	"We take care to make sure product details are correct but the information shown, including vegan and vegetarian suitability, ingredients, and alcohol by volume (ABV) may change. Do not rely solely on information from this website - always check the label before consuming and contact the manufacturer if the label doesn't specify or is unclear."
Drink Supermarket	None
Iceland	"We have done everything we can to ensure that the information we provide about all the products listed on this website is accurate and up-to-date. However, food products in particular are constantly being improved so their ingredients and the other information we publish here, including details of their nutritional content and allergy advice, is liable to change. For this reason, we strongly recommend that you always read the actual product label carefully before using or consuming any product. Please do not rely solely on the information provided on this website."
Majestic	None
Morrisons	"This page serves as a summary for information purposes only, and are designed to enhance your shopping experience on the website. While we have taken care in preparing this summary and believe it is accurate, it is not a substitute for your reading the product packaging and label prior to use. You should note that products and their ingredients are subject to change. If you do require precise ingredient information you should consult the manufacturer, whose contact details will appear on the packaging or label. Shop is therefore unable to accept liability for any incorrect information. Where this description contains a link to another party's website for further information on the product, please note that Shop has no control over and no liability for the contents of that website."
Ocado	"This page serves as a summary for information purposes only, and are designed to enhance your shopping experience on the Ocado website. While we have taken care in preparing this summary and believe it is accurate, it is not a substitute for your reading the product packaging and label prior to use. You should note that products and their ingredients are subject to change. If you do require precise ingredient information you should consult the manufacturer, whose contact details will appear on the packaging or label. Ocado is therefore unable to accept liability for any incorrect information. Where this description contains a link to another party's website for further information on the product, please note that Ocado has no control over and no liability for the contents of that website."
Sainsburys	"The above details have been prepared to help you select suitable products. Products and their ingredients are liable to change. You should always read the label before consuming or using the product and never rely solely on the information presented here. If you require specific advice on any Sainsbury's branded product, please contact our Customer Careline on 0800 636262. For all other products, please contact the manufacturer, whose details will appear on the packaging or label. Sainsbury's is therefore unable to accept liability for any incorrect information."
Tesco	"While every care has been taken to ensure product information is correct, food products are constantly being reformulated, so ingredients, nutrition content, dietary and allergens may change. You should always read the product label and not rely solely on the information provided on the website.

	If you have any queries, or you'd like advice on any Tesco brand products, please contact Tesco Customer Services, or the product manufacturer if not a Tesco brand product. Although product information is regularly updated, Tesco is unable to accept liability for any incorrect information. This does not affect your statutory rights."
Waitrose	"Please note that while we take every care to make sure the product information displayed on our website is correct, product recipes are regularly changed. This may affect nutrition and allergen information therefore you should always check product labels and not rely solely on the information presented here."

3. Results

Product	Info on brand website	Info on retailer sites
Barefoot Merlot	None	None on any stockist (n=10)
Barefoot Pinot Grigio	None	None on any stockist (n=10)
Barefoot Pink Moscato	None	None on any stockist (n=10)
Barefoot Bubbly Pink Moscato	None	None on any stockist (n=4)
Blossom Hill Soft and Fruity Red	None	None on any stockist (n=6), but there is a link to the owner's site from Sainsbury's.
Blossom Hill Crisp and Fruity White	None	None on any stockist (n=7)
Blossom Hill White Zinfandel	None	None on any stockist (n=8)
Blossom Hill Spritz Elderflower and Lemon	Not featured on brand website	None on any stockist (n=2)
Campo Viejo Rioja Tempranillo	None, despite a blog by owner Pernod Ricard claiming it is featured https://www.pernod-ricard.com/en/media/pernod-ricard-feature-nutritional-information-all-its-strategic-brands	Calorie info alone, on 2 of 10 retailer sites that list it. (Amazon lists per 100ml and per serving and Waitrose lists per serving).
Campo Viejo Blanco Rioja	None, despite a blog by owner Pernod Ricard claiming it is featured https://www.pernod-ricard.com/en/media/pernod-ricard-feature-nutritional-information-all-its-strategic-brands	None on any stockist (n=5)
Casillero Del Diablo Cabernet Sauvignon	None	None on any stockist (n=11)
Casillero Del Diablo Sauvignon Blanc	None	None on any stockist (n=11)
Echo Falls Fruit Fusion Summer Berries (9%)	Not featured on brand website	Calorie info alone on the 1 retailer site that lists it. (Tesco lists per 100ml and per serving).

Echo Falls Fruit Fusion Summer Berries (5.5%)	None	Calorie info alone on 5 of 7 retailer sites that list it. (Asda, Iceland, Morrisons, Ocado and Tesco all list per 100ml and per serving)
Echo Falls Sparkling Summer Berries	None	None on any stockist (n=4)
Hardy's Stamp Shiraz Cabernet	None	Calorie info alone on 4 of 6 retailer sites that list it. (Asda, Iceland, Ocado and Tesco all list per 100ml and per serving).
Hardy's Crest Chardonnay	None	Calorie info alone on both 2 retailer sites that list it. (Asda and Tesco both list per 100ml and per serving)
I Heart Pinot Noir	None	None on any stockist (n=4)
I Heart Pinot Grigio	None	None on any stockist (n=7)
I Heart Rosé	None	None on any stockist (n=6)
I Heart Prosecco	None	None on any stockist (n=7)
Isla Negra Merlot	None	None on any stockist (n=3)
Isla Negra Sauvignon Blanc Px	None	None on any stockist (n=4)
Isla Negra Rosé	Not featured on brand website	None on any stockist (n=2)
McGuigan Reserve Cabernet Sauvignon	None (although there is a blog on the website that mentions calories and gives an estimated number per glass: https://www.mcguiganwines.co.uk/our-table-content-folder/zero-zone/alcohol-free-cut-calories.html)	None on any stockist (n=6)
McGuigan Reserve Chardonnay	None (although there is a blog on the website that mentions calories and gives an estimated number per glass: https://www.mcguiganwines.co.uk/our-table-content-folder/zero-zone/alcohol-free-cut-calories.html)	None on any stockist (n=5)
Yellow Tail Shiraz	No ingredients, but a full nutritional info PDF is provided for all Yellow Tail products in the FAQ section of the brand website: https://www.yellowtailwine.com/wp-content/uploads/2021/06/YT-Nutritional-Chart-2021_UK.pdf	None on any stockist (n=11)
Yellow Tail Pinot Grigio		None on any stockist (n=10)
Yellow Tail Rosé		None on any stockist (n=6)
Yellow Tail Sparkling Rosé		None on any stockist (n=1)

6. References

[1] WHO Regional Office for Europe (2017). *Alcohol labelling: A discussion document on policy options*.
[2] Shield, K. D. et al. (2014). Chronic diseases and conditions related to alcohol use. *Alcohol Research: Current Reviews, 35*(2), 155.
[3] Institute for Health Metrics and Evaluation (2022). GBD 2019 Compare Visualization Tool. *University of Washington.* https://vizhub.healthdata.org/gbd-compare/
[4] Institute for Health Metrics and Evaluation (2022). GBD 2019 Results Tool. *University of Washington.* https://vizhub.healthdata.org/gbd-results/
[5] Burton, R. et al. (2016). *The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies: An evidence review.* Public Health England.
[6] Scottish Government (2022). *Scottish Health Survey 2021: Summary Report*.
[7] Schoueri-Mychasiw, N. et al. (2020). Examining the impact of alcohol labels on awareness and knowledge of national drinking guidelines: A real-world study in Yukon, Canada. *Journal of Studies on Alcohol and Drugs*, *81*(2), 262-272.
[8] Royal Society of Public Health (2014). *Increasing awareness of 'invisible' calories from alcohol.*
[9] Food Standards Scotland (2014). *Statistical Press Notice: National Diet and Nutrition Survey in Scotland: results from years 1, 2, 3 and 4 combined (2008-2012).*
[10] Bates, B. et al. (Eds.). (2014) *National Diet and Nutrition Survey: Results from Years 1, 2, 3 and 4 (combined) of the Rolling Programme (2008/2009-2011/2012).*
[11] Traversy, G. & Chaput, J. P. (2015). Alcohol Consumption and Obesity: An Update. *Current Obesity Reports, 4*(1): 122-130.
[12] Alcohol Health Alliance (2018). *How we drink, what we think: Public views on alcohol and alcohol policies in the UK.*
[13] Royal Society for Public Health (2014). *Increasing awareness of 'invisible' calories from alcohol*.
[14] Alcohol Health Alliance (9 July 2021). Just one in five Brits know how many calories are in a glass of wine. *Alcohol Health Alliance.* https://ahauk.org/news/just-one-in-five-brits-know-how-many-calories-are-in-a-glass-of-wine/
[15] WHO Regional Office for Europe (2017). *Alcohol labelling: A discussion document on policy options*.
[16] WHO Regional Office for Europe (2017). *Alcohol labelling: A discussion document on policy options*.
[17] WHO Regional Office for Europe (2017). *Alcohol labelling: A discussion document on policy options*.
[18] Tobacco Labelling Resource Centre (2013). United Kingdom. *Tobacco Labelling Resource Centre.* https://tobaccolabels.ca/countries/united-kingdom/
[19] Borland, R. et al. (2009). Impact of graphic and text warnings on cigarette packs: findings from four countries over five years. *Tobacco Control*, *18*(5), 358-364.
[20] Borland, R. et al. (2009). Impact of graphic and text warnings on cigarette packs: findings from four countries over five years. *Tobacco Control*, *18*(5), 358-364.
[21] Hammond, D. (2011) Health warning messages on tobacco products: a review. *Tobacco Control*, *20*(5), pp.327-337.
[22] Dimova, E. & Mitchell, D. (2020). Rapid literature review on the impact of health messaging and product information on packaging of alcohol and other unhealthy commodities. Alcohol Focus Scotland.
[23] Schoueri-Mychasiw, N. et al. (2020). Examining the impact of alcohol labels on awareness and knowledge of national drinking guidelines: A real-world study in Yukon, Canada. *Journal of Studies on Alcohol and Drugs*, *81*(2), 262-272.
[24] Hobin, E. et al. (2020). Testing alcohol labels as a tool to communicate cancer risk to drinkers: A real-world quasi-experimental study. *Journal of Studies on Alcohol and Drugs*, *81*(2), 249-261.
[25] Zhao, J. et al. (2020). The effects of alcohol warning labels on population alcohol consumption: an interrupted time series analysis of alcohol sales in Yukon, Canada. *Journal of Studies on Alcohol and Drugs*, *81*(2), 225-237.
[26] Alcohol Health Alliance UK (2020). *Drinking in the Dark: How alcohol labelling fails consumers*.
[27] European Commission (2021). *Europe's Beating Cancer Plan.*
[28] Alcohol Health Alliance (2020). *Drinking in the Dark: How alcohol labelling fails consumers*.
[29] Royal Society for Public Health (2014). *Increasing awareness of 'invisible' calories from alcohol*.
[30] Alcohol Health Alliance (9 July 2021). Just one in five Brits know how many calories are in a glass of wine. *Alcohol Health Alliance.* https://ahauk.org/news/just-one-in-five-brits-know-how-many-calories-are-in-a-glass-of-wine/
[31] Action on Sugar (2020). *Alcohol Survey Report*.

[32] Alcohol Health Alliance UK (2020). *Drinking in the Dark: How alcohol labelling fails consumers*.
[33] Heller, L. (2006). New study examines male-female diet divide. *Food Navigator.* https://www.foodnavigator.com/Article/2006/10/05/New-study-examines-male-female-diet-divide
[34] Financial Times (December 2014). The other glass ceiling: women winemakers. *The Financial Times.* https://www.ft.com/content/0e0a597c-7ffc-11e4-adff-00144feabdc0
[35] Alcohol Change UK (2022). *Delivering a problem? Online sales and deliveries of alcohol – how robust are current systems in protecting children and vulnerable adults from alcohol harm.* https://s3.eu-west-2.amazonaws.com/files.alcoholchange.org.uk/documents/Delivering-a-problem-final.pdf
[36] IWSR drinks market analysis (n.d.). *Beverage alcohol ecommerce value grows by 42% in 2020, to reach US$24 billion*. https://www.theiwsr.com/beverage-alcoholecommerce-value-grows-by-42-in-2020-to-reachus24-billion/
[37] The Grocer (2021). The 100 most popular booze brands in the UK in 2021. *The Grocer.* https://www.thegrocer.co.uk/britains-biggest-alcohol-brands/the-100-most-popular-booze-brands-in-the-uk-2021/658254.article
[38] European Commission (2012). Guidance document for competent authorities for the control of compliance with EU legislation on: Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers…with regard to the setting of tolerances for nutrient values declared on a label.
[39] Alcohol Health Alliance UK (2020). *Drinking in the Dark: How alcohol labelling fails consumers*.
[40] Making Sense of Sugar (n.d.). Calorie Count: Sugar, fat and other nutrients. *Making Sense of Sugar.* https://makingsenseofsugar.com/balanced-diet/calorie-count/
[41] NHS (2020). *Calories in alcohol*. https://www.nhs.uk/live-well/alcohol-advice/calories-in-alcohol/
[42] Department of Health (2017). *Technical guidance on nutrition labelling*.
[43] Department of Health (2017). *Technical guidance on nutrition labelling*.
[44] UK Government, Department of Health & Social Care (2021). *Calorie labelling in the out of home sector: implementation guidance*.
[45] Dimova, E. & Mitchell, D. (2020). Rapid literature review on the impact of health messaging and product information on packaging of alcohol and other unhealthy commodities. Alcohol Focus Scotland
[46] Department of Health (2017). *Technical guidance on nutrition labelling*.
[47] Department of Health, Welsh Government, Northern Ireland Department of Health, and Scottish Government (2016). *UK Chief Medical Officers' Low Risk Drinking Guidelines*.
[48] Yellow Tail wine (2021). Nutritional Chart 2021. *Yellow Tail Wine.* https://www.yellowtailwine.com/wp-content/uploads/2021/06/YT-Nutritional-Chart-2021_UK.pdf. Accessed 13 December 2021.
[49] Treasury Wine Estates. Calorie Information. *Treasury Wine Estates*. https://www.tweglobal.com/calories?brand=blossom%20hill
[50] Action on Sugar (2020). *Alcohol Survey Report*.
[51] Direct Line Group (2020). One glass and over the limit – new study exposes drink drive danger of home measures. *Direct Line Group.* https://www.directlinegroup.co.uk/en/news/brand-news/2020/one-glass-and-over-the-limit---new-study-exposes-drink-drive-dan.html
[52] Food Standards Scotland (2014). *Statistical Press Notice: National Diet and Nutrition Survey in Scotland: results from years 1, 2, 3 and 4 combined (2008-2012).*
[53] Bates, B. et al. (Eds.). (2014) *National Diet and Nutrition Survey: Results from Years 1, 2, 3 and 4 (combined) of the Rolling Programme (2008/2009-2011/2012).*
[54] Traversy, G. & Chaput, J. P. (2015). Alcohol Consumption and Obesity: An Update. *Current Obesity Reports, 4*(1): 122-130.
[55] Alcohol Health Alliance (2020). *Drinking in the Dark: How alcohol labelling fails consumers*.
[56] Alcohol Health Alliance (2022). *Contents Unknown: How alcohol labelling still fails consumers*.
[57] Royal Society for Public Health (2014). *Increasing awareness of 'invisible' calories from alcohol*.
[58] Alcohol Health Alliance (9 July 2021). Just one in five Brits know how many calories are in a glass of wine. *Alcohol Health Alliance.* https://ahauk.org/news/just-one-in-five-brits-know-how-many-calories-are-in-a-glass-of-wine/
[59] Dimova, E. & Mitchell, D. (2020). Rapid literature review on the impact of health messaging and product information on packaging of alcohol and other unhealthy commodities. Alcohol Focus Scotland.
[60] Dimova, E. & Mitchell, D. (2020). Rapid literature review on the impact of health messaging and product information on packaging of alcohol and other unhealthy commodities. Alcohol Focus Scotland.

[61] Zhao, J. et al. (2020). The effects of alcohol warning labels on population alcohol consumption: an interrupted time series analysis of alcohol sales in Yukon, Canada. *Journal of Studies on Alcohol and Drugs*, *81*(2), 225-237.
[62] Jones, D. et al (2021). Health information, messaging and warnings on alcohol packaging: a focus group study with young adult drinkers in Scotland. *Addiction Research & Theory, 29*(6), 469-478.
[63] Alcohol Health Alliance (9 July 2021). Just one in five Brits know how many calories are in a glass of wine. *Alcohol Health Alliance.* https://ahauk.org/news/just-one-in-five-brits-know-how-many-calories-are-in-a-glass-of-wine/
[64] WHO Regional Office for Europe (2017). *Alcohol labelling: A discussion document on policy options*..
[65] Alcohol Health Alliance (11 May 2021). Great British public and leading health experts back changes to alcohol labelling. *Alcohol Health Alliance.* https://ahauk.org/news/great-british-public-and-leading-health-experts-back-changes-to-alcohol-labelling/
[66] Alcohol Health Alliance UK (2022). *Contents Unknown: How alcohol labelling still fails consumers*.
[67] Action on Sugar (2020). *Alcohol Survey Report*.
[68] WHO Regional Office for Europe (2017). *Alcohol labelling: A discussion document on policy options*.