

Attitudes of Australian cider drinkers

Research summary

Preventing harm from alcohol



Introduction

The Australian alcohol palette is changing. Beer, a long-time fixture of the Australian alcohol market, is decreasing in popularity each year as more drinkers turn to wine, spirits and, increasingly, cider. While constituting only 4% of the alcohol market in Australia in 2011, cider sales grew by 30% during the same year.

It is clear that the growth of the cider market reflects broader changes in the alcohol tastes and preferences of Australian consumers. However, less is known about the drinking behaviours and beliefs of the drinkers driving these changes and whether this should be of concern to public health authorities.

Background

Alcohol is the most widely used drug in Australia, and while many drink responsibly, a significant number of Australians drink at harmful levels. In 2010, two in five (41%) Australians aged 18+ consumed alcohol at least once in the previous 12 months, in a pattern that placed them at risk of an alcohol-related injury from a single drinking occasion (AIHW 2011). Overall it has been estimated that alcohol use and misuse costs Australians up to \$15 billion annually (Collins & Lapsley, 2008).

Due to this, one area of policy and research focus has been on whether particular types of alcoholic beverages are associated with a greater risk of harm relative to other products. Most notably, in 2008, the Australian Federal Government enacted a price increase on ready to drink spirits (RTDs) due to concern that these products were fuelling rates of binge drinking among young people (Carragher & Chalmers 2011). While there was a subsequent drop in consumption of RTDs among this group, it remains to be seen whether this constituted an overall reduction in drinking rates, or whether consumers moved onto other products (Carragher & Chalmers 2011; Connell 2012).

More recent research has made comparative assessments between the types of alcoholic beverages Australians consume and associated short- and long-term impacts upon health. From this, full-strength and home brew beer appear to have the strongest association with harmful drinking behaviours, followed by spirits, premixed drinks and cider (Mathews & Callinan 2013).

However, Australians' alcohol preferences are far from static. Although traditionally known as a nation of full-strength beer drinkers, consumption declined by 13% over the last decade, with drinkers switching to premium, imported, low carbohydrate and craft options (Connell 2012). Wine consumption in Australia during this period has been rising steadily, from 2.94 litres per person in 2000 to 3.56 litres per person in 2009, driven in part by changing consumer tastes, improved availability and sharp declines in the price of wine relative to other alcoholic products (Connell, 2012). While some of these changes have been driven by price, some have suggested that this is indicative of a change in the Australian drinkers' palette (Fitzgerald 2012).

The recent growth in the cider market in Australia reflects this. Despite representing only 4% of the alcoholic beverage market, cider has become one of the fastest growing products in Australia, with the volume of cider available on the market increasing by 30% in 2011 alone. This is expected to continue to grow by 21% between 2011 and 2016, in terms of volume (Euromonitor International 2012).

Highlights of this research can be found at
www.vichealth.vic.gov.au/cider

That cider is increasing in popularity is beyond dispute, but what lies behind this growth is more uncertain. One explanation is the inefficiencies in Australia's alcohol taxation system. Traditional ciders, such as apple and pear flavours, are subject to the Wine Equalisation Tax (WET), along with wine and fortified wine (Carragher, Shakeshaft & Doran, 2012). These products are taxed at a cheaper rate than other comparable alcoholic beverages, such as flavoured ciders and full-strength beer (Carragher, Shakeshaft & Doran 2012). However, it ought to be noted that while traditional ciders have grown by as much as 22% annually, sweetened ciders such as Rekorderlig and Kopparberg recorded growth of almost 300% in 2012 (Greenblat 2013).

Others suggest that the popularity of cider among drinkers is due to the successful marketing of the product. For instance, cider is regularly depicted as a drink to 'enjoy over ice' making it particularly appealing to drinkers during summer (Euromonitor International 2012).

Lastly, the uptake of cider by drinkers may reflect the broader switch Australian consumers are making to 'premium' alcohol brands and products (Euromonitor International 2012).

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Methods

An online survey was commissioned by VicHealth and conducted in July 2012 by i-Link online research company, which recruited participants from their database, offering a small incentive for participation. The sample was a purposeful sample of 6000 participants from across Australia and a minimum of 600 respondents were required to have consumed cider in the previous 12 months. The sample was representative of age and gender and included a metropolitan/rural split. Ethics approval for the survey was granted by Anglicare Victoria's Research Ethics Committee.

The questionnaire was split into two sections. For the first section all respondents who had consumed any kind of alcohol in the previous 12 months were included in the analysis. The questions for this section were based upon the National Drug Strategy Household Survey and focused on alcohol consumption patterns, perceptions and behaviours. Further screening for entry to the second part of the survey meant that respondents had to have consumed cider in the previous 12 months. Questions in this section focused on the perceptions and behaviours related to drinking cider.

All respondents in the survey had consumed alcohol in the previous 12 months, as this was a criteria for participation. A small proportion (4% [± 0.5]) stated that cider was their main drink. A further 15% stated that cider was one of their usual drink choices (though not their main choice) – meaning that in total, one in five respondents (19.4% [± 1.0]) reported that cider was either their main choice or one of their usual alcoholic beverages. These 19.4% form the basis of the analysis of the first section and are referred to as regular cider drinkers, and are compared to non-cider drinkers.

A further 15% of the sample had consumed cider at least once in the last 12 months, meaning a total of 34.6% (± 1.3) of participants had consumed cider at least once in the previous year. This group forms the basis of the analysis for the second section of the report. For the purposes of comparison, the sample is split between two groups: regular cider drinkers (those who had selected cider as their main or usual drink), and occasional cider drinkers (had cider in the last 12 months, but did not select it as a main or usual drink).

Statistical differences within data were determined when statistical results produced p-values of 0.05 or less. Except where otherwise noted, the data presented in this report was cross tabulated and checked for significance.

Key findings

Age, gender and education

The prevalence of cider consumption within the population is linearly related to age – the older the person, the less likely it is that cider is their drink of choice (see Table 1). Women (21.2% [± 1.4]) more frequently report cider as their main or usual alcoholic beverage than men (17.5% [± 1.4]). Education level is a further significant factor. Respondents with any type of university degree (bachelor or postgraduate) were more likely (27% [± 2.1]) to commonly consume cider than those without (16.4% [± 1.1]). While this effect was moderated by gender, it holds for both males and females (see Table 2). A logistic regression analysis confirmed the importance of all three predictor variables (age, gender, education level). The odds ratios¹ and 95% confidence intervals are reported in Table 3.

Table 1: Percentage of regular cider drinkers by age group (with 95% CI)

% age <30	% age 30-39	% age 40-49	% age 50+
29.9 (± 2.5)	23 (± 2.4)	17.5 (± 2.3)	13.4 (± 1.3)

Table 2: Percentage of regular cider drinkers by gender and education (with 95% CI)

	University degree	Other education
Female	31.5% (± 3.1)	17.4% (± 1.5)
Male	22.7% (± 2.7)	15.4% (± 1.6)

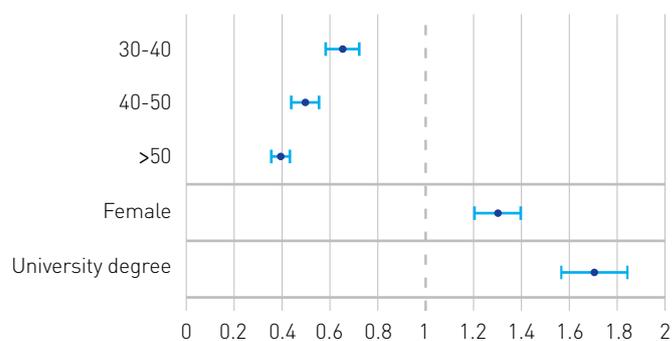
¹ An odds ratio (OR) >1 (e.g. 2) suggests that an outcome is more likely (for 2 it is twice as likely) than the outcome it is compared to. Conversely, an OR <1 (e.g. 0.5) suggests that an outcome is less likely (for 0.5 it is half as likely) than the outcome it is compared to. See the Australian Bureau of Statistics for a longer example.

Age, gender, and education level are all significant predictors of a preference for cider over other alcoholic beverages.

Table 3: Odds ratios for predictor variables age, gender, education level on preference for cider over other alcoholic beverages (with 95% CI)

	Age				Gender	Education
	<30	30-40	40-50	>50	Female	University degree
Odds Ratio (95% CI)		.65 (± 1.1)	.49 (± 1.1)	.38 (± 0.6)	1.31 (± 1.7)	1.70 (± 2.4)

Figure 1: Odds ratios for declaring cider as the main or usual alcoholic beverage: by age group (base <30), gender (base = male), education (base = no tertiary education)



Drinking at harmful levels

Drinking at harmful levels (five or more standard drinks in a single sitting) is common and 55% (± 1.3) of drinkers did so within the previous 12 months. While the proportion of people drinking at harmful levels every day (3% [± 0.4]) is low, nearly 20% will consume alcohol at harmful levels at least weekly. Although it seems encouraging that 45% reported never drinking at harmful levels (see Table 4), this result is moderated by age. Harmful drinking on a weekly, monthly or annual basis was higher for younger people (aged under 30) (see Figure 2). The only exception was for the segment of individuals drinking at harmful levels every day; here the proportion was equivalent across all age groups.

Table 4: Frequency of drinking at harmful levels (five drinks or more)

Every day	At least once per week	At least once per month	Less than monthly	Never
2.8 [±.4]	14.8% [±.9]	17.2% [±1]	19.7% [±1]	45.5% [±.2]

Figure 2: Frequency of drinking at harmful levels (five drinks or more) by age group

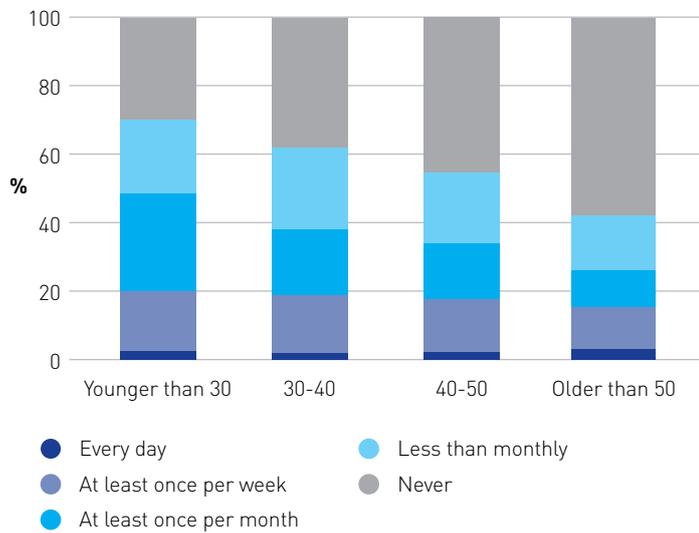
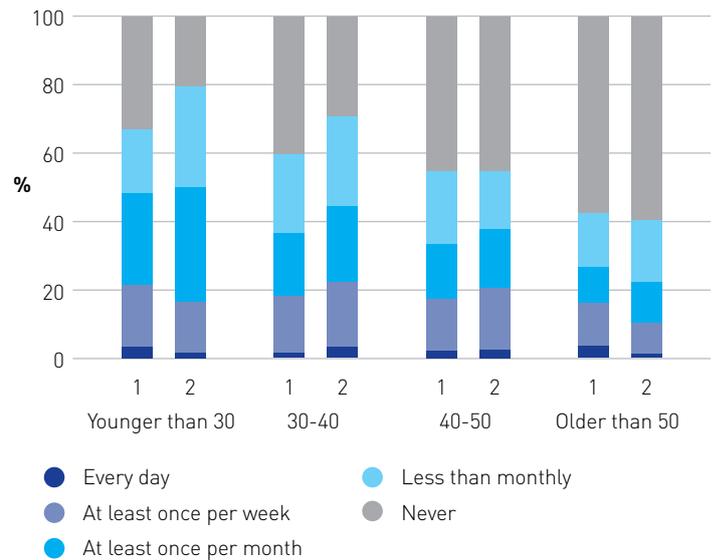


Figure 3 shows a further breakdown of the data by respondents' preference for cider (regular cider drinkers) as opposed to other alcoholic beverages (non-cider drinkers). The differences were negligible for the two older age groups and most pronounced for the youngest age group surveyed. Overall for the youngest group, a higher proportion of regular cider drinkers drink at harmful levels at least occasionally (80% [±4.1]) than non-cider drinkers (67% [±3.1]). However, the proportion of individuals drinking at harmful levels highly frequently, that is at least weekly, is lower for regular cider drinkers (16% [±3.7]) than non-cider drinkers (21% [±2.1]).

Figure 3: Frequency of drinking at harmful levels (five drinks or more) by age and preference for cider (1 = Non-cider drinker 2 = Regular cider drinker)



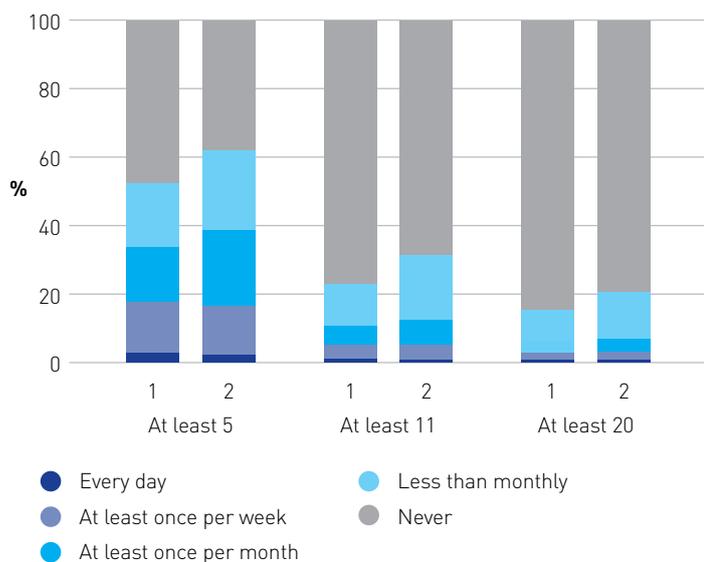
This result must be interpreted with caution as gender is a confound of drinking excessively at high frequencies. Table 5 shows the data separated by gender for the youngest cohort (younger than 30 years); while the difference between proportions for drinking at harmful levels at least weekly is unsubstantiated for females, there is a small, yet statistically non-significant effect for males.

Table 5: Percentage of individuals drinking at harmful levels at least weekly, by gender and preference for cider

	Regular cider drinker	Non-cider drinker
Male	24%	28%
Female	11%	12%

Looking at even higher levels of harmful drinking (11, 20 standard drinks in a single sitting) consistent with recent work by Livingston (2013), Figure 4 shows that these are far less prevalent at frequent rates, but remain stable at low frequencies. Two-thirds (68% [±2.7]) of regular cider drinkers had not consumed more than 11 standard drinks on a drinking occasion during the previous year, compared to three quarters (76% [±1.0]) of non-cider drinkers. This result is surprising in that females are more likely than males to drink cider, yet females are overall less likely than males to engage in harmful drinking (AIHW, 2011). Thus, it was expected that regular cider drinkers would be less likely to drink highly excessively, but the opposite appears to be the case.

Figure 4: Frequency of drinking at harmful levels for different thresholds (5, 11, 20 drinks in a single sitting) by regular cider drinker (2) and non-cider drinkers (1)



Drinking behaviours

There is a notable difference in the distribution of situations in which people drink alcohol, according to whether they were regular cider drinkers or non-cider drinkers (see Figure 5). Regular cider drinkers tend to report drinking in a greater variety of contexts. The location in which regular cider drinkers and non-cider drinkers drink are very similar (Figure 6) though the former appear more likely to drink in licensed premises such as pubs, bars, nightclubs and social events at a friend's house or a party at a friend's house.

Figure 5: Number of situations in which respondents reported drinking alcohol by classification of cider as main or usual drink

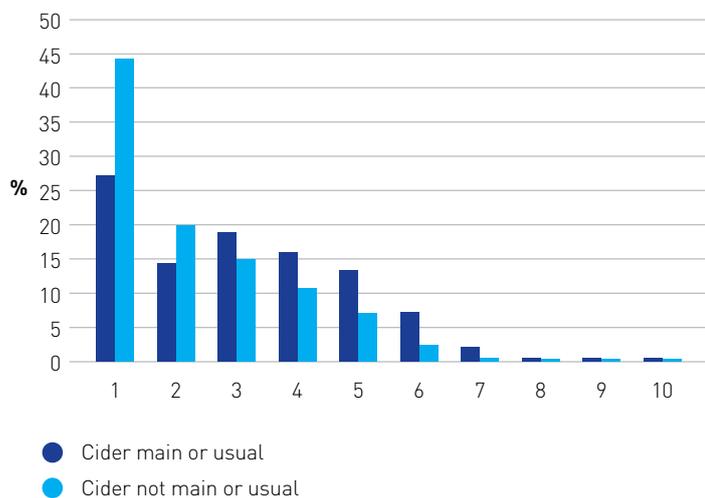
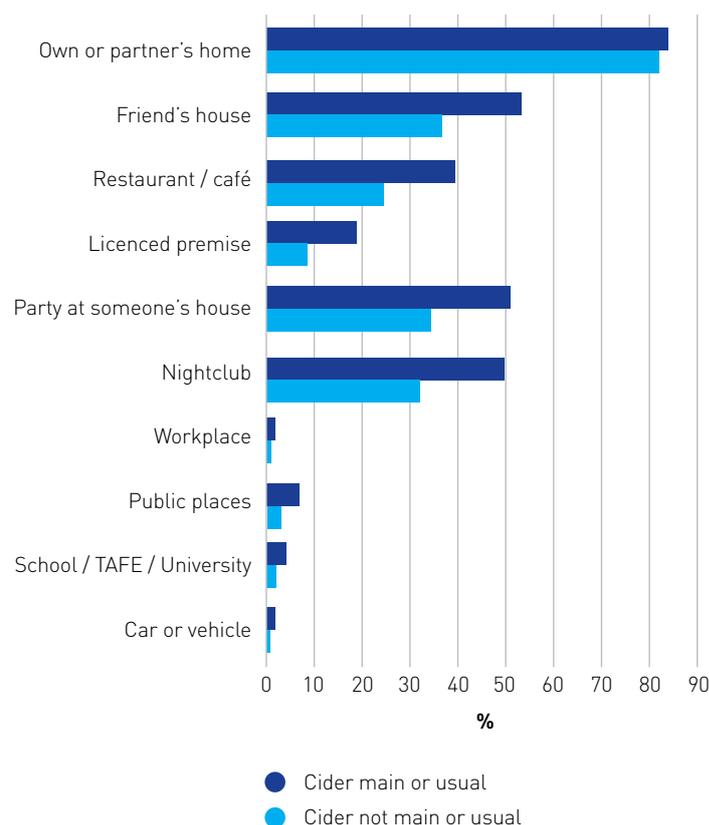


Figure 6: Percentage of respondents reporting consumption of alcohol at specific locations by classification of cider as main or usual drink (regular cider drinker compared to non-cider drinker)

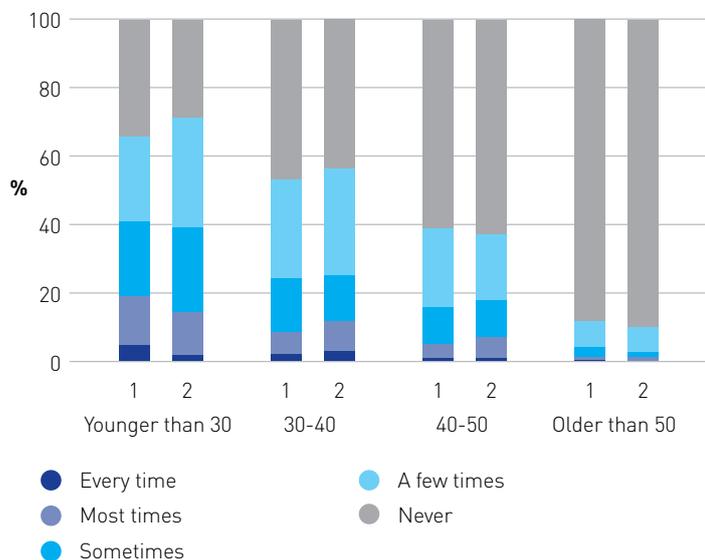


Attitudes toward health and alcoholic beverages

Participants were asked to rank how important certain factors were when choosing their alcoholic beverage. Overall, drinkers of any alcoholic product believed taste, familiarity, price and time of day to be among the most important factors in selecting an alcoholic beverage. However, compared to other non-cider drinkers, regular cider drinkers were more likely to select taste (85% vs. 79%) and this difference was similar across all age groups. Sensitivity to price was higher for regular cider drinkers (59% vs. 53%). For all participants, regardless of the drink of choice, age moderated price sensitivity, especially for the over 50s group (OR <30 vs. >50 = 1.47). There were also differences with respect to time of day (57% vs. 53%), location (42% vs. 36%), activity (41% vs. 32%) and food pairing (34% vs. 27%).

There was no difference in the proportion of regular cider drinkers and non-cider drinkers in terms of their intention to get drunk (OR regular cider vs. non-cider drinkers = 1.01). However, intention to get drunk is strongly influenced by age, though again, there is no meaningful interaction between age and preference for cider (see Figure 7). Notably, among the youngest group of respondents, more than 60% indicated that they at least occasionally drank with the intention to get drunk.

Figure 7: Intention to get drunk by age group and preference for cider (1 = no preference for cider, 2 = preference for cider)

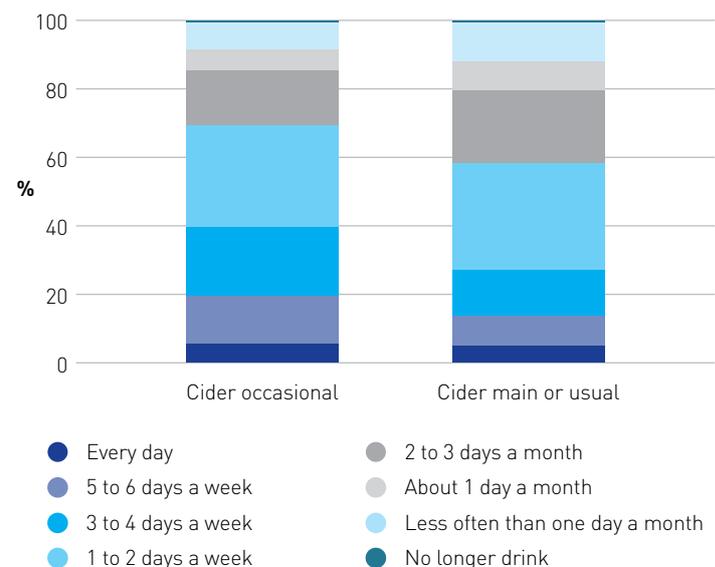


Those participating in the study were also asked a range of questions regarding alcohol consumption and perceptions of health. The majority of regular cider drinkers and non-cider drinkers had little regard for the nutritional value of alcoholic beverages (81% vs. 80%). However, regular cider drinkers were more likely to follow a healthy and balanced diet than non-cider drinkers (84% vs. 80%), but were less likely to agree with the statement that 'alcohol cannot be part of a healthy lifestyle' (24% vs. 30%).

Attitudes of cider drinkers

The following section features questions that were asked of respondents who had consumed cider any time in the last 12 months. Of the 6000 respondents who had participated in earlier parts of the survey, 2073 (35% of the sample) had consumed cider during the previous year. Subsequent analysis focused on this group of drinkers, with the comparison being between those who selected cider as their main or usual drink (regular cider drinkers; n=1163) and those who had it less often (occasional cider drinkers; n=910). In terms of self-reported alcohol consumption patterns over the previous 12 months, regular cider drinkers show overall lower levels of alcohol consumption (see Figure 8).

Figure 8: Frequency of drinking alcohol by strength of preference for cider (occasional cider drinkers vs. regular cider drinkers)



Cider drinking occasions

Respondents who had consumed cider in the previous 12 months were asked the extent to which they agreed or disagreed with a range of statements about occasions when they drink cider, and how cider compares to other alcoholic beverages.

Generally, regular cider drinkers were more likely to agree with statements emphasising the social or seasonal aspects of drinking occasions, compared to occasional cider drinkers (see Table 6). For example, 83% of regular cider drinkers agreed that cider is 'good to drink at a bar or pub with friends' compared to 54% of occasional cider drinkers. Similarly, 79% of regular cider drinkers agreed that cider 'is an alcoholic beverage I would usually drink in summer' compared to 66% of occasional cider drinkers.

Table 6: Cider drinking occasions

Drinking occasions: cider is	Regular cider drinkers	Occasional cider drinkers
...good to drink at a pub or bar with friends	83%	54%
...an alcoholic beverage I would usually drink in summer	79%	66%
...good to drink for big occasions and celebrations	62%	40%
...an alcoholic beverage I would usually have with meals at a home or a restaurant	56%	40%

Regular cider drinkers were also more likely to believe that cider is less bloating than other alcohol products (47% vs. 42%), and that it is good to start on before moving onto other alcoholic products (38% vs. 33%). See Table 7.

Table 7: Perceptions of cider

Cider compared to other drinks	Regular cider drinkers	Occasional cider drinkers
...tastes better than other alcoholic beverages	72%	42%
...is less bloating than other alcoholic beverages	47%	42%
...is good to start on before moving on to other alcoholic drinks	38%	33%

Interestingly, occasional cider drinkers were more likely to believe that cider is:

- more expensive than other alcoholic beverages (38% vs. 33%)
- too sweet compared to other alcoholic beverages (43% vs. 23%)
- more likely to get you drunk than other alcoholic beverages (26% vs. 20%).

There was no significant difference between regular and occasional cider drinkers when asked whether cider was healthier than other alcoholic beverages (33% respectively), or better for the waistline than other alcoholic beverages (21% vs. 24%).

Cider brands and flavours

Those who had consumed cider in the last 12 months were asked to rank how important the following factors are when selecting a cider:

- brand
- flavour
- cost
- availability
- alcohol content
- it's what my friends are drinking
- number of calories in drink.

Compared to occasional cider drinkers, regular cider drinkers were more likely to rank flavour (85% vs. 74%), brand (44% vs. 33%), cost (60% vs. 53%) and availability (62% vs. 46%) as important factors in choosing their drink.

However, occasional cider drinkers were more likely than regular cider drinkers to rank the number of calories in a drink (16% vs. 11%) or whether their friends were drinking the same (18% vs. 11%) when selecting a cider.

Brand

Participants were given a list of some of the most popular ciders available in Australia and asked to select their preferred brand. Overall, 34% nominated Strongbow, followed by Rekorderlig (17%), Bulmers (14%), 5 Seeds (14%) and other (14%). Mercury had the smallest proportion of responses with 7.53%. Regular cider drinkers were more likely to prefer Rekorderlig (21% vs. 12%) and less likely to prefer Strongbow (31% vs. 38%), compared to occasional cider drinkers.

Flavour

When asked to select their preferred flavour, two thirds (66%) of those who had cider in the last 12 months selected apple, with pear the next most popular (15%). More recent cider flavours tended to be less popular, with 8% selecting strawberry, followed by raspberry (3%) and blackberry (3%). Regular cider drinkers were more likely to prefer pear-flavoured ciders, compared to occasional cider drinkers (18% vs. 13%), with no further significant differences found.

While taste and flavour were certainly significant for regular cider drinkers, the social or seasonal aspect of drinking occasions were also important to this group.

Low-strength option

Many of the ciders available on the Australian market vary by alcohol content and volume. For instance, Rekorderlig Premium Wild Berries Cider is 500mL and 4% alcohol per unit, Strongbow Genuine Apple cider is 355mL and 5% alcohol per unit and Mercury Cider Draught is 750mL and 5.2% alcohol per unit. Some smaller cider brands such as Old Mout and Cheeky Rascal are 8% alcohol per unit. The extent to which consumers are aware of the alcohol concentration of their drink is not known. Survey participants were asked whether they would consider drinking a reduced-strength cider (i.e. less than 3.5% alcohol per unit), if one were available. Overall, 79% of survey participants would consider a low-strength cider if one were available, with no significant difference found between usual and non-usual cider drinkers.

Summary

Age, gender, and education level are all significant predictors of a preference for cider over other alcoholic beverages. It is more than twice as popular with young people (<30) than older (>50) consumers, and popularity is linearly related to age. The typical cider drinker is more likely to be young (under 30), tertiary educated (bachelor or postgraduate degree) and female.

Among the sample, harmful drinking is still highly prevalent – with more than half of the people surveyed (55%) reported drinking in a manner that would put them at risk of injury from a single drinking occasion at least once in the previous 12 months. Overall, cider drinkers were more likely to engage in occasional harmful drinking although they are less likely to drink harmfully on a weekly or more frequent basis. While this difference disappears at higher age ranges, it should be cause for concern; cider drinkers are more likely to be female, and although females are generally less likely to drink harmfully, this is not the case for cider. The higher prevalence of occasional excess among regular cider drinkers is not related to a desire to get drunk, which showed no difference between regular cider drinkers and non-cider drinkers. It suggests other, non-conscious drivers of drinking behaviour.

Despite this pattern of drinking, the majority of regular cider drinkers try to follow a healthy and balanced diet, and are more likely to do so compared to non-cider drinkers. However, regular cider drinkers were less likely to agree with the statement 'alcohol cannot be part of a healthy lifestyle' compared to non-cider drinkers, and only a third believed that cider was healthier than other types of alcohol, which was not significantly different to the views of non-cider drinkers. At best, cider is seen as 'less bloating' than other alcohol products.

This suggests other factors are at play in driving the popularity of cider, while taste and flavour were certainly significant for regular cider drinkers, the social or seasonal aspect of drinking occasions were also important to this group. This is borne out to some extent by the range of social situations in which regular cider drinkers drink their preferred alcoholic beverage, which is notably more varied than for non-cider drinkers. Cider was seen as a good drink for big occasions, or for drinking at a bar or pub with friends, and perceived as a 'summer drink'. While this shows that cider is seen as a social drink, it also suggests that the marketing of cider as a summer drink by alcohol companies has been successful. The notion of cider as a social drink is further strengthened by the finding that regular cider drinkers consume alcohol less often than occasional cider drinkers. Cider may not be an every day drink, but when consumed, it is frequently consumed at harmful levels.

Despite this, 79% of cider drinkers would consider a low-strength cider (<3.5% alcohol per unit) if one were available, with no significant difference found with non-cider drinkers. Given that the cider market in Australia is growing in terms of popularity and the range of products available, there may be an opportunity to reduce harmful alcohol consumption by making such a product available.

There is an opportunity to reduce this harmful drinking, with 79% of regular cider drinkers indicating that they would consider a low-strength cider if one were available.

Conclusion

Cider is associated with harmful levels of alcohol consumption, and is popular among young people, females and those holding a bachelor or postgraduate degree. This group generally tried to maintain a 'healthy and balanced diet', but evidently did not see the role alcohol may play in this. This may be underpinned by the perception of cider as a 'social' or a 'summer' drink, suggesting that cider may not be an every day drink, but when consumed is done so to excess.

However, there is an opportunity to reduce this harmful drinking, with 79% of regular cider drinkers indicating that they would consider a low-strength cider if one were available. As the cider market is expanding quite rapidly in Australia, this may present an opportunity to influence the drinking attitudes and behaviours among a segment of the population.

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