Type and prevalence of nutrition-related claims on alcoholic ready-to-drink beverages

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Abstract

Objective: To examine the extent of nutrition-related claims on ready-to-drink (RTD) alcohol products to provide insights into the types and prevalence of claims across the category.

Methods: Product type, alcohol content, and presence/type of nutrition-related claims (n=491) information was collected, March-May 2022. Chi-square analyses with pairwise z-tests were used to identify differences in claim prevalence by product type. Spearman's correlation was used to assess the relationship between alcohol content and number of claims.

Results: Approximately half (52%) of RTDs displayed at least one claim, with the most common claims referring to naturalness (32%), sugar-(31%), and energy-content (32%). Hard seltzers displayed the most claims (96%, M=3.4 claims/product, SD=1.6). There was a moderate negative correlation between alcohol content and number of claims (r =-.43, p<.001).

Conclusion: Results show the extensive use of nutrition-related claims on RTDs in Australia, particularly for hard seltzers.

Implications for public health: Nutrition-related claims have the potential to mislead consumers about the healthiness of alcohol products and more stringent regulation of nutrition-related claims is needed.

Keywords: alcohol, labelling, nutrition claims, ready-to-drink products, prevention

Introduction

Icohol consumption per capita is declining in many countries, especially among younger cohorts.¹ This decline has been partly attributed to growing awareness of health harms associated with alcohol and increasing health consciousness among consumers.² The alcohol industry is employing strategies to increase the perceived healthiness of these products in an attempt to rejuvenate sales, including increasing utilisation of 'better-for-you' messaging in the form of on-pack nutrition-related claims ('claims').^{2–5} In the limited work in this area, these claims have been found to be most evident on alcoholic ready-to-drink (RTD) beverages,^{3,4} a product category popular among younger drinkers.⁶

The use of claims on alcohol products is concerning due to their potential to mislead consumers by creating a 'health halo'.^{2,5} Regardless of beverage type, alcohol is a carcinogen and its use is associated with physical and psycho-social harms.¹ Very little is known about how nutrition-related claims are used across different

alcoholic beverage types, and hence whether they are being applied strategically to target particular drinker segments.³

The present study aimed to assess the use of claims in the Australian RTD market and whether usage varies by RTD type. Packaged beverages sold in Australia that exceed 1.15% alcohol by volume (ABV) are not permitted to display claims suggesting consumption is beneficial for health, but are permitted to display claims about energy, carbohydrate, and gluten content.⁷ Generic terms such as 'natural' are neither explicitly permitted nor banned.

Methods

Data were collected at three major alcohol retailers in Sydney (Dan Murphy's, Liquorland, BWS), March–May 2022. Photographs were taken of alcohol products in-store and subsequently coded (as per the FoodSwitch protocol⁸). RTD products (n=491) were classified by alcohol type (e.g., whiskey). Exceptions were hard seltzer products (commonly

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fermented sugar base with carbonated water), products with multiple base alcohols ('multiple'), and products where alcohol type was not listed or there were few products (<20) in the sub-category ('other'). Single-serve and multiple-pack (ranging from 2 to 30 items) versions of products were included in analyses as separate products.

Data extracted from product images included product type, alcohol content, and nutrition-related claims. Descriptive analyses were conducted to determine type and prevalence of nutrition-related claims. To examine whether the proportion of products making nutrition-related claims differed by RTD product type, chi-square tests with pairwise z-tests were conducted for each claim (Bonferroni adjusted alpha level (α =.002)). Spearman's rank correlation was used to examine the relationship between ABV% and the number of claims displayed on products.

Results

Approximately half (52%) of the assessed products displayed at least one nutrition-related claim (Table 1). Prevalence of claims was highest among hard seltzers (96%), vodka (44%) and gin RTDs (40%). The average number of claims per product was 1.5 (SD=1.8), with the largest number of claims on a single product being six (distribution by number of claims shown in Supplementary Table S1). Hard seltzers had the highest average number of claims (M=3.4, SD=1.6), followed by vodka RTDs (M=1.2, SD=1.6).

Average ABV% across RTD product categories ranged from 4.5% to 11.3%. ABV% had a moderate negative association with number of nutrition-related claims; for every 1% increase in ABV, the average number of nutrition-related claims on products decreased by .43 (p<.001).

Around one-third of the sampled products displayed claims allocated to the natural (32%), energy (32%) and sugar (31%) categories. Natural claim examples included 'natural flavours', and 'natural ingredients'. Energy and sugar claims included statements referring to the absolute or relative amount of energy/sugar in the drink (e.g., '5 g sugar' and 'low calories'). All energy claims used 'calories' terminology. Gluten (23%: e.g., 'gluten free') and carbohydrate (21%: e.g., 'only 2 g carbs') were the next most common claim types, followed by vegan (13%: e.g., 'vegan friendly'). Hard seltzers had substantially larger

proportions of products displaying all claim types than other RTD categories, with most differences reaching statistical significance.

Discussion

The aim of the present study was to analyse the nature and prevalence of nutrition-related claims displayed on RTDs available for sale in Australia. Previous research in the alcohol and food domains has found that claims such as those identified in the present study are often interpreted by consumers as indicators of overall product healthfulness.^{9,10} The common use of claims on the sampled RTDs is thus highly problematic.

Hard seltzers demonstrated the greatest prevalence of nutritionrelated claims, both overall and in terms of specific claim types. This product category is primarily targeted at younger drinkers,¹¹ who have been found to be more health conscious than older age groups.⁶ The average of 3.4 nutrition-related claims on hard seltzers indicates that producers are intensively using these claims to market these products as healthy options.

The most commonly displayed claims were those relating to naturalness, sugar, and energy. The relatively frequent use of glutenfree claims in the assessed sample is also noteworthy due to RTDs being generally free from gluten. Further, all energy claims in the sample used calories terminology, despite kilojoules being the Australian measure. This may reflect industry efforts to make the energy contribution of the product appear as small as possible. Overall, it appears that RTD producers are taking advantage of the current Australian alcohol labelling code to use nutrition-related claims to promote these products in ways likely to enhance perceived healthiness and desirability while downplaying harms associated with alcohol.⁹

Consistent with previous research, products with higher alcohol content were less likely to display claims.³ This has been partially attributed to alcohol being the most energy-dense component of alcoholic beverages (e.g., 29 kJ/g of ethanol vs 17 kJ/g of sugar), making lower-alcohol products more suitable for low energy claims.³ The finding that hard seltzers were significantly more likely to display most types of nutrition-related claims could be due to their relatively low alcohol content and the use of carbonated water as the mixer.

| Table 1: Presence of nutrition-related claims on sampled alcoholic ready-to-drink alcoholic beverages. | | | | | | | | | | |
|--|--------------------------|------------|----------------------------------|---------------------|-------------------|--------------------------|------------------------|--------------------|-------------------|---------------------|
| RTD product type | Number of products | ABV% | Display at least one claim | Number of claims | Claim category | | | | | |
| | | | | | Sugar (n=155) | Carbohydrates (n=101) | Energy (n—156) | Natural (n—159) | Vegan (n—62) | Gluten (n=114) |
| | n | Mean (SD) | % | Mean (SD) | % | % | % | % | % | % |
| All produc | ts 491 | 6.3 (5.2) | 52 | 1.5 (1.8) | 31 | 20 | 32 | 32 | 13 | 23 |
| Hard seltze | ers 135 | 4.5 (0.9) | 96 | 3.4 (1.6) | 64 ^t | 62 ^t | 64 ^t | 67 ^t | 25 ^t | 60 ^t |
| Vodka | 121 | 5.9 (5.0) | 44 | 1.2 (1.6) | 32 ^u | 6 ^{u,v} | 34 ^u | 28 ^u | 11 ^{t,u} | 13 ^{u,v,w} |
| Whisky | 85 | 7.5 (6.5) | 22 | 0.4 (0.8) | 13 ^v | 0 ^v | 9 ^{v,w,x,y,z} | 6 ^v | 4 ^u | 4 ^w |
| Gin | 60 | 6.2 (6.5) | 40 | 1.0 (1.4) | 22 ^{u,v} | 5 ^{u,v} | 22 ^{u,y,z} | 18 ^{u,v} | 10 ^{t,u} | 20 ^v |
| Rum | 43 | 7.1 (4.8) | 40 | 0.4 (0.5) | 5 ^v | 0 ^{u,v} | 0 ^x | 28 ^u | 9 ^{t,u} | 0 ^{u,w} |
| Multiple ^a | 24 | 11.3 (8.4) | 33 | 0.7 (1.1) | 0 ^v | 17 ^u | 33 ^{t,u,w,z} | 17 ^{u,v} | 0 ^{t,u} | 0 ^{u,v,w} |
| Other ^b | 23 | 8 (3.4) | 17 | 0.3 (0.9) | 9 ^{u,v} | 0 ^{u,v} | 0 ^{u,x,y} | 9 ^{u,v} | 9 ^{t,u} | 9 ^{u,v,w} |

RTD = ready-to-drink.

Notes: Proportions with the same superscript in each column did not significantly differ from each other at a Bonferroni adjusted alpha level of .002; Very small numbers of products displayed other types of nutrition-related claims such as additive free and lactose free.

^aProducts with multiple types of base alcohol.

^bProducts with other alcohol types or those that did not have >20 products in the group.

The diversity and quantity of claims might suggest the targeting of health-conscious younger drinkers.⁶

The primary study limitation was the collection of data from three stores, although the outlets represented the largest alcohol retailers in Australia. A second limitation was the confinement of analyses to the RTD product category; further research is needed to replicate analyses across the broader alcohol market. Finally, consumers' responses to these claims were not assessed, and this is an important area for future research attention.

Public health implications

These results show extensive use of nutrition-related claims on RTD alcohol products, especially in the youth-targeted hard seltzer category. As such claims have the potential to mislead consumers about the healthiness of alcohol products, more stringent regulation of nutrition-related claims is needed to provide appropriate consumer protection.

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Ethics

No human or animal data were used in this study, so ethics approval was not required.

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Conflicts of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this article.

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Appendix A Supplementary data

Supplementary data to this article can be found online at https://doi. org/10.1016/j.anzjph.2023.100106.