

Research

Qualitative insights into Australian consumers' views for and against government action on sugary drinks

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Key points

- Government policy action is lacking in relation to curbing overconsumption of sugary drinks in Australia. Understanding the values and beliefs that underpin community views can inform public health advocacy efforts to enact change
- Factual information about sugary drinks, health risks and the economic burden of obesity appear to be influential in shaping consumer views on government action

Abstract

Objectives: Despite significant evidence of harms associated with high levels of sugar-sweetened beverage (SSB) consumption, and international moves towards regulation to curb overconsumption of such drinks, Australia has been slow to take policy action. This study provides in-depth insights into consumers' reactions to different SSB policy options.

Methods: Eight focus groups were undertaken with 59 regular SSB consumers and/or household purchasers, stratified by: young adults aged 21–29 years (no children), parents aged 35–50 (with children at home); gender; and socio-economic status. Consumer responses to potential government intervention and policy options were explored using thematic analysis.

Results: Three main themes were identified. Theme 1 describes participants' changing views on regulation of SSBs throughout the focus groups, expressed through shifts in understandings of personal responsibility and the role of government. It was noted that the term 'regulation' should be used judiciously, as it was widely misunderstood to infer bans. Theme 2 articulates the participants' preference for child-focused measures and educative measures such as clearer front-of-pack labelling. Taxation on SSBs was viewed more favourably if paired with investment into education. Theme 3 describes the parallels that participants drew between SSBs and other substances.

 Provision of education, accurate consumer information and protection of children are regarded as appropriate roles for government in relation to sugary drinks **Conclusions:** A comprehensive approach that includes education, childfocused interventions and regulatory approaches may increase acceptability of policy measures to curb overconsumption of SSBs.

 Framing of policy measures relating to sugary drinks is critical in gaining public support

Introduction

Leading health agencies identify sugar-sweetened beverages (SSBs) or sugary drinks as a critical target for intervention due to high levels of free sugars and adverse health impacts¹ such as obesity, type 2 diabetes, tooth decay, and increased cardiovascular disease risk.²⁻⁴ Consumption is high in many countries⁵ including Australia, and especially high among males, adolescents, young adults and those from lower socio-economic areas.⁶

As burdens of obesity and noncommunicable diseases increase globally, some governments are intervening to curb overconsumption of unhealthy food and beverages, particularly SSBs, via social marketing campaigns⁷, taxes⁸ and on-package warning labels.⁹ Health agencies are calling for restrictions on marketing, sponsorship and availability of SSBs.^{10,11} There is substantial evidence of the effectiveness of taxes to reduce consumption⁸, however, industry opposition to all regulation is also substantial and enduring.

Industry groups routinely lobby against public health regulation of alcohol, tobacco and food/beverages using libertarian framing, labelling potential regulation as 'nanny-state' intervention, implying disproportionate paternalism by governments. They advocate instead for consumers to take 'personal responsibility' for their actions. Such framing is used to discourage legislation which threatens industry practice and profits. This framing places disproportionate emphasis on self-determination and ignores the environmental and social drivers of health behaviours.^{12,13}

Up to 70% of the Australian public support taxation of SSBs, when accompanied by other obesity prevention initiatives.¹⁴⁻¹⁶ Support for other obesity prevention initiatives exceeds 80%¹⁴, with the greatest levels of support observed for measures that are educative or improve consumer information¹⁷, child-focused initiatives¹⁴, food reformulation¹⁴, and taxation coupled with investment into education or health.^{16,17} These patterns reflect variations in community perceptions of the role of government¹² and attitudes towards specific interventions.¹³ Broader research on the role of government has shown that Australians appear to both strongly endorse the notion of individual responsibility for health and support a role for government in preventive health¹³ and obesity prevention.¹⁸

Australia is widely acknowledged as a world leader in tobacco control, yet remains in its infancy with respect to regulatory responses to overconsumption of unhealthy foods and SSBs.¹¹ The role of government in obesity prevention has been explored qualitatively^{13,19} and support for many SSBs measures has been quantified, however public support or opposition to the range of potential government interventions for SSBs has not been examined in detail.

This study aimed to provide deeper and more nuanced insights into the views of Australians who consume SSBs about potential government interventions to curb overconsumption, and to inform Australian public health efforts in this area.

Methods

Eight focus groups were conducted with 59 regular SSB consumers/purchasers, who would be directly affected by potential interventions. Regular consumers were young adults who consumed SSBs at least weekly, and regular purchasers were parents who were the main household grocery buyers who purchased SSBs for the household at least weekly. Young adults (YA) aged 21-29 years (four groups ranged from 6–8 participants in each; n = 27) were selected as an adult group with higher consumption than other adult age groups⁶, and parents (P) aged 35–50 years (four groups ranged from 7–8 participants in each; n = 30) were identified as influential on children's behaviour. Details were not available for two participants who chose not to have their personal details recorded at the time of the focus groups. Focus groups were held in Melbourne, Victoria, in 2014 with equal representations of low- and mid-socio-economic status (SES), women (W) and men (M). Groups were constructed to obtain a diversity of views, rather than to analyse perspectives according to these attributes.

Participant recruitment and moderation were undertaken by an experienced external contractor, MMResearch, which recruits participants from professional recruitment agencies accredited by Interview Quality Control Australia. These agencies recruit participants from existing databases of people who have agreed to be contacted to participate in research. Potential participants were emailed an invitation to take part in the research. They were screened via telephone regarding weekly SSB consumption (YA) or family SSB purchasing (P); and to ensure they were not employed by the beverage industry. Focus groups were up to 90 minutes. Participants received reimbursement for their time commensurate with market rates (\$80).

The moderator used a guide containing openended questions to facilitate discussion, and oriented participants with broad initial questions on consumption patterns, preferences, and perceived health effects. Participants were prompted (from a discussion guide): "Some health groups think that consuming sugarsweetened drinks such as soft drinks contributes to obesity in adults and children and want these to be regulated. What, if anything, do you think needs to be done?" Examples of regulation were provided as required, namely taxation on SSBs, restrictions on marketing to children, and restrictions on sales in schools and children's settings. Discussion prompts included: the role for government; the circumstances in which intervention would be warranted: and the relevance of health information. For the final discussion, the moderator introduced stimulus material - an 'Australian facts about sugary drinks' infographic factsheet²⁰ produced by the Australian Livelighter program (www.livelighter.com.au) on overconsumption of sugar and SSBs and implications for health - to gauge participants' reaction to the information and explore any impact on attitudes towards SSB consumption and/or the perceived role of government.

Groups were recorded to facilitate transcription and analyses. Two researchers (CM, KE) observed the groups, evaluated responses, read and reviewed the transcripts, and compared notes, to identify patterns and potential themes. Based on thematic analysis described by Braun and Clarke²¹, descriptive analysis was undertaken to identify common themes and subthemes, using NVivo qualitative analysis software (Melbourne; QSR International; Version 10). The study and analysis were exploratory, however inductive and deductive coding were used, based on a simple framework derived from the discussion guide, and emerging codes and themes based on the researchers' observations of the groups. The researchers reviewed coding structures and themes, and any inconsistencies in interpretation were addressed through review and consensus. Data saturation, defined as no new themes or information being identified, was achieved.

Ethics approval was obtained from the University of South Australia Human Research Ethics Committee (Protocol number: 0000032462).

Results

Three main themes were identified. Theme 1 describes participants' changing views on regulation of SSBs during the focus group, expressed through a shift in understanding of personal responsibility and the role of government. Theme 2 articulates the participants' preference for educative and child-focused measures. Theme 3 describes the parallels that participants drew between SSBs and other substances. We explore the relationship between these issues in the discussion.

1. Regulation, personal responsibility and the role of government

There was a clear shift in participants' perceptions of government regulation during the focus group discussion. While many participants were positively disposed to regulation at its initial mention, some had an initial negative reaction. They perceived regulation as limiting individual choice and used terms such as "elimination" and "banning" of SSBs. Throughout discussions, regulation or "bans" were juxtaposed against educative or informational measures, which some participants argued were a better approach, further demonstrating their conceptualisation of regulation as only being related to restriction of SSBs.

"I don't think it's right of the government to ban things, but maybe their role there is in a way of trying to make people more aware or... rules around packaging and labelling, so things are more aware." (G4:M,P,mid-SES)

Negative reactions were also driven by concerns that regulation may undermine people's rights to make their own decisions. Some argued they should be able to make their own informed decisions about consumption. Many considered children's consumption to be parents' responsibility.

"I think the government's responsible for educating, but it should be up to us to make our own decisions, so government shouldn't be making that decision for us and saying you know what, we are not going to stock Coke in Australia ever again. It should be their responsibility to give everyone the facts and the knowledge to be able to make a decision by themselves." (G2:M,YA,mid-SES)

"Kids are supposed to be taken care of by their parents, the parents should be controlling it and then as an adult you make your own decisions whether you want to." (G1:F,YA,mid-SES)

As participants debated the merits and drawbacks of regulation during the groups, many changed their stated views. A shared belief emerged of governments' responsibility for citizens, as information providers and misinformation protectors, at a minimum, and frequently beyond that. These changes in views occurred as a result of information being presented in the following ways: when example regulations were provided by the moderator or suggested by participants; and after discussion of potential health implications, perceptions of obesity prevalence in Australia, and health system costs. For some, a shift occurred after viewing the factsheet.²⁰ By the end of the discussion, regardless of initial position, all 59 participants indicated support for some form of government intervention.

"I think the government has the responsibility for everyone in the country, and if people are sick and all their teeth are rotting away from sugar then they should have responsibility over it." (G2:M,YA,mid-SES)

2. Preference for educative and child-focused measures

Participants spontaneously moved discussions away from regulation towards alternative solutions they viewed as more favourable. Consumer information and education, particularly education aimed at children, was held in high regard.

a) Clear consumer information

The lack of clear consumer information to guide consumption was noted, and concrete guidelines and sugar labelling were suggested.

"...give them a framework of how much they are supposed to consume, like per day, you are supposed to consume 60 grams of sugar per day, if you drink two cans of Coke, that's half of your sugar intake, then what's left, so give people a kind of framework because we don't really know how much we are supposed to consume." (G7:F,P,Iow-SES).

"I think labelling would probably be better, like having a label saying there is 20 teaspoons of sugar in this can, than banning it." (G1:F,YA,mid-SES)

b) Restrictions on advertising, sponsorship or school sales

Many participants were supportive of child-focused restrictions (e.g., on advertising to children and school sales), arguing that children were less capable of making educated decisions, legitimising choice restriction.

"It's marketing, there's too much advertising. Our kids are educated with this advertising and so the restriction of that is maybe a good thing." (G4:M,P,mid-SES)

Some participants opposed marketing restrictions, arguing that companies were entitled to advertise in a "free market". Although participants did not offer

comments regarding potential deceptiveness in industry marketing practices, they argued that consumers should not be misled and acknowledged governments' role in regulating advertising claims and in counter-advertising health risks. Participants' comments on advertising restrictions included:

"I feel it's a bit restrictive...Obviously they shouldn't be able to mislead, like promote it as something healthy but I still feel like their product is trying to make money and they should be able to market their product." (G2:M,YA,Mid-SES)

"I'd rather be more direct about it and just advertise the health risks and the problems, rather than try and hide away the advertising." (G4:M,P,Mid-SES)

"I think it's a free market, and I think we need to educate consumers." (G3:F,P,Mid-SES)

Although there was some support for restrictions on SSB sponsorship and/or promotion at children's events, the predominant concern was how these events would otherwise be funded, and participants raised the potential for government support as an alternative to SSB sponsorship of events.

c) Regulation of product (sugar content or size)

Some participants suggested regulation of serving size and/or sugar content of SSBs, arguing that people often consume larger size bottles (e.g. 600 ml) in one sitting, even though it might be "too much".

"And sometimes there might be like two-and-a-half serves in a bottle, and I'm going to drink a bottle when I buy a bottle, maybe they could regulate that." (G2:M,YA,mid-SES)

In contrast, other participants reacted negatively to the idea of regulating product size or content, citing concerns about choice, value for money, potential impact on taste and other additives to enhance flavour.

d) Taxation

Initial negative reactions to the option of a SSB tax by some participants were driven by i) concern about personal impact (not wanting to pay more); ii) the argument that it would be disproportionate to the harms; iii) a belief that a SSB tax might lead to taxation of additional unhealthy products; and iv) the argument that a tax would be ineffective.

"Another stupid excuse to put another tax out there, that yes, I think it does affect people's weight, but to the point of needing to put a tax on it for health, I don't think." (G5:F,YA,Iow-SES)

"Yeah I think it's a real slippery slope, there are so many foods out there that are bad for you, start with the sugary drinks, then go to the chocolate, then okay, I've handled sugar, let me now go to fat, I'm going to ban all fattening foods." (G7:F,P,low-SES)

In contrast, other participants who held more positive views towards an SSB tax thought it would be a good deterrent and raise awareness of risks.

"I think it's a good thing and it would raise awareness too perhaps. For the people that, if the government came out and said we are now taxing soft drinks, people might tend to look at it as more of an unhealthy, evil sort of." (G3:F,P,mid-SES)

Taxes were supported by participants citing economic arguments, for example that obesity is an economic burden on the health system. Participants were more positively disposed towards a tax if it helped fund education, and/or subsidisation of other measures to improve health.

"I'm a hypocrite [acknowledging their change of opinion], it makes me think oh people smoke and I have to pay taxes that pay for them to be in hospital, and I'm like well it's the same with obesity, like so maybe now I think about it, maybe I would be happy for it." (G1:F,YA,mid-SES)

3. Parallels with tobacco and alcohol

Many participants drew parallels with government action on tobacco and alcohol consumption. This was done both in support of and against regulation of SSBs.

"I just don't think it's in the same basket, like smoking, is a really addictive activity, whereas drinking soft drink is not the same thing, you don't get addicted to it like you get addicted to cigarettes." (G2:M,YA,mid-SES)

"[The government] played a really good role in the cigarettes, and I think they've done a fantastic job, like in reducing the cigarette sales, and I think they could do it in this." (G7:F,P,Iow-SES)

"First thing I'm thinking is where it's going. Tobacco, they kind of skipped alcohol, and not put any warnings there, and they are jumping on sugar. Haven't you missed something here with alcohol?" (G6:M,YA,low-SES)

Discussion

This qualitative study explored the beliefs, attitudes and values that underpin community receptiveness to government intervention to curb overconsumption of SSBs through a range of regulatory approaches. Furthermore, the study provides insights into the impact of language, framing and factual information on consumers' initial reactions to, and detailed consideration of, different initiatives. There was widespread appreciation that obesity is a public health problem and acceptance that government has a legitimate role in intervening, consistent with other research.^{13,18,19} As previously observed^{13,22}, there was pervasive use of personal/parental responsibility, choice and freedom framing in participants' commentary. This underpinned initial reactions against different regulatory measures, most notably taxation. Such arguments reflect a libertarian conceptualisation of autonomy, which equates individual autonomy with freedom from interference and restrictions.¹² These arguments align with claims of 'nanny-state' paternalism and are routinely employed by industry to oppose regulation around tobacco, alcohol and SSBs.²³

Paradoxically, personal responsibility framing was also used to argue in favour of government intervention. Participants argued that government should inform and educate consumers, and prevent misinformation, thereby enabling informed consumer choice. These arguments maintained a focus on the centrality of individual choice, but acknowledged limited ability of some individuals (especially children) to make informed decisions, necessitating intervention. This is akin to the concept of relational autonomy described by Mackenzie, which Carter and colleagues use to frame some nanny-state paternalist interventions as non-paternalist on relational grounds.¹²

'Regulation' was a widely misunderstood term, construed by some participants as widespread bans on SSBs. This is an important finding because regulation is an essential tool in public health and a widely used term. Participants' initial negative views and understanding of 'regulation' changed in response to: factual information and/or discussion about sugar content; health effects of SSBs; health costs and exploration of the range of potential policy initiatives. This is consistent with previous studies demonstrating acceptance of government intervention in obesity, including regulation, in the context of informed deliberations.^{18,19} Health system costs borne by government were a compelling justification for intervention, highlighting the importance of justifying policy reform in both health and economic terms. Clear consumer information was considered essential, reflecting societal values about consumers' right to be informed.²⁴ As Australia reviews its food and beverage labelling laws²⁵ and considers mandating added sugar labelling, consumer advisory (warning) labels, and Health Star Ratings, it is clear that such improvements would be consistent with community expectations of the role of government.

Participants favoured child-focused initiatives and initiatives promoting education, which complements previous quantitative SSB studies^{13,18,19}, and more broadly focused qualitative studies^{14,16,17,26}, as well as aligning with participants' preference for relational paternalism regarding the role of governments. Preferences for education reflect, in part, the fact that self-determination, self-governance and autonomous decisions, require

exposure to relevant information and developed skills to respond to that information. Education is an important contributor to change health behaviours, however, it is unlikely to be sufficient in isolation.²⁷ The higher palatability of child-focused interventions reflects an understanding that children lack the competence of adults, that they have greater susceptibility to food marketing²⁸, are vulnerable and require protection. SSB consumption and overweight/obesity are prevalent in children, suggesting that framing policy measures as protective of children's futures will align with evidence and fundamental community values.

Some participants demonstrated ongoing concern regarding restrictions on sponsorship, due to uncertainty about the financial viability of children's sport, offering insight into lower levels of support for restricting sponsorship relative to other measures found in quantitative studies.^{14,16,17} Exposing marketing tactics may further increase support and recognition of the need for regulation, including in sponsorship. Taxation was the least popular regulatory option, but was more favourably received when paired with other interventions. This study reinforces the importance of advocacy for SSB policy measures being made in the context of calls for a multifaceted or comprehensive approach that includes educative elements.

Participants presented analogies of government action on tobacco and alcohol to support their positions and test their ideas about SSBs. Participants made comparisons to other unhealthy foods and alcohol, sometimes to query the focus on SSBs and sometimes to raise a 'thin edge of the wedge' flag. Contextualising SSB policies within broader obesity prevention strategies will assist with allaying consumer concerns about undue focus on one product, or plans for expansion to all foods. Highlighting the strength of evidence of harm to health associated with SSBs is also relevant.

Limitations

The sample size and selection of participants limit the generalisability of these study findings, however, responses were varied, and achieved saturation. The findings are not representative of all young adults or parents of young children and comparisons could not be made between perspectives based on group attributes. Participants were recruited from market research databases and screened to exclude those employed in the beverage industry. However, they were not screened for prior involvement in industry-funded food and beverage research, which has the potential to influence perceptions of regulation, and thus should be noted when interpreting the results. To minimise risk of social desirability influences, and social norms, the moderator employed an open-minded and impartial approach, and ensured all participants contributed.

Conclusion

Given there has been limited research offering insights into the reasons underpinning public receptiveness to potential SSB policy initiatives, this study is both novel and revealing. These findings reinforce the pervasiveness of the concept of personal responsibility in the health prevention policy debate, but also the legitimacy and expectation of government intervention for SSBs and obesity prevention. Policy makers can engage with this language and frame future policy change on SSBs as promoting autonomy by assisting people to make informed choices, for themselves and their children. They can also frame changes as protecting consumers from the distorting influences of industry marketing, as well as redressing obesogenic environments, and economic burden of obesity associated with sugary drinks.

Support for regulation can be strengthened through provision of simple factual information about sugar content of SSBs and health risks of excess consumption, and by increasing community understanding regarding the ways in which intervention can positively support rather than infringe on autonomy and personal freedom.

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Peer review and provenance

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Competing interests

None declared.

Author contributions

CM designed the study with advice from MW, ABM, DR, KO and KE. KE led the qualitative analysis. CM, KE and JD drafted the manuscript. All authors contributed to and approved the final manuscript.

References

 World Health Organization. Guideline: sugars intake for adult and children. Geneva: WHO; 2015 [cited 2020 Mar 18]. Available from: apps.who.int/iris/bitstream/ handle/10665/149782/9789241549028_eng.pdf;jsessio nid=36740D281BE661E75EF5ECC8E8C29F48?sequen ce=1

- 2. Te Morenga L, Mallard S, Mann J. Dietary sugars and body weight: systematic review and meta-analyses of randomised controlled trials and cohort studies. BMJ. 2012;346:e7492.
- 3. Te Morenga LA, Howatson AJ, Jones RM, Mann J. Dietary sugars and cardiometabolic risk: systematic review and meta-analyses of randomized controlled trials of the effects on blood pressure and lipids. Am J Clin Nutr. 2014;100:65–79.
- Vartanian LR, Schwartz MB, Brownell KD. Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. Am J Public Health. 2007;97(4):667–75.
- Singh GM, Micha R, Khatibzadeh S, Shi P, Lim S, Andrews KG, et al. Global, regional, and national consumption of sugar-sweetened beverages, fruit juices, and milk: a systematic assessment of beverage intake in 187 countries. PLoS One. 2015;10(8):e0124845.
- Australian Bureau of Statistics. Australian Health Survey: nutrition first results - foods and nutrients, 2011-12. Consumption of sweetened beverages. Canberra: ABS; 2015 [cited 2020 Mar 18]. Available from: www.abs.gov.au/ausstats/abs@.nsf/Lookup/ by%20Subject/4364.0.55.007~2011-12~Main%20 Features~Consumption%20of%20Sweetened%20 Beverages~710
- Morley BC, Niven PH, Dixon HG, Swanson MG, McAleese AB, Wakefield MA. Controlled cohort evaluation of the LiveLighter mass media campaign's impact on adults' reported consumption of sugar-sweetened beverages. BMJ Open. 2018;8:e019574.
- Backholer K, Blake M, Vandevijvere S. Sugar-sweetened beverage taxation: an update on the year that was 2017. Public Health Nutr. 2017;20(18):3219–24.
- 9. World Cancer Research Fund International. NOURISHING framework. London: WCRFI; 2018 [cited 2019 Jan 31]. Available from: www.wcrf.org/sites/default/files/Nutritionlabels.pdf
- 10. Lobstein T. Reducing consumption of sugar-sweetened beverages to reduce the risk of childhood overweight and obesity. Geneva: World Health Organization; 2014 [cited 2018 Sep]. Available from: www.who.int/elena/titles/ commentary/ssbs_childhood_obesity/en
- Obesity Policy Coalition. A comprehensive policy program to reduce consumption of sugar-sweetened beverages in Australia. Melbourne: OPC; 2018 [cited 2018 Sep 7]. Available from: www.opc.org.au/downloads/ policy-briefs/reduce-sugary-drinks-in-australia.pdf
- 12. Carter SM, Entwistle VA, Little M. Relational conceptions of paternalism: a way to rebut nanny-state accusations and evaluate public health interventions. Public Health. 2015 Aug;129(8):1021–9.
- Grunseit AC, Rowbotham S, Crane M, Indig D, Bauman AE, Wilson A. Nanny or canny? Community perceptions of government intervention for preventive health. Crit Public Health. 2019;29(3):274–89.

- Morley B, Martin J, Niven P, Wakefield M. Public opinion on food-related obesity prevention policy initiatives. Health Promot J Austr. 2012;23(2):86–91.
- 15. Research Australia. Australia speaks! Research Australia opinion polling. Sydney: Research Australia; 2016 [cited 2018 Dec 6]. Available from: researchaustralia.org/wpcontent/uploads/2016/01/Research-Australia_Polling-Report-2016.pdf
- Sainsbury E, Hendy C, Magnusson R, Colagiuri S. Public support for government regulatory interventions for overweight and obesity in Australia. BMC Public Health. 2018;18(1):513.
- Howse E, Freeman B, Wu JHY, Rooney K. 'The university should promote health, but not enforce it': opinions and attitudes about the regulation of sugar-sweetened beverages in a university setting. BMC Public Health. 2017;18(1):76.
- Moretto N, Kendall E, Whitty J, Byrnes J, Hills AP, Gordon L, et al. Yes, the government should tax soft drinks: findings from a citizens' jury in Australia. Int J Environ Res Public Health. 2014;11:2456–71.
- 19. Street JM, Sisnowski J, Tooher R, Farrell LC, Braunack-Mayer AJ. Community perspectives on the use of regulation and law for obesity prevention in children: a citizens' jury. Health Policy. 2017;121(5):566–73.
- 20. LiveLighter. Australian facts about sugary drinks infographic sheet. Perth: LiveLighter; 2014 [cited 2014 Jan 15]. Available from: livelighter.com.au/assets/ resource/infographic/2020-01-17%20sugary%20 drinks%20infographic.pdf
- 21. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77–101.
- 22. Haynes E, Hughes R, Reidlinger DP. Obesity prevention advocacy in Australia: an analysis of policy impact on autonomy. Aust N Z J Public Health. 2017;41(3):299–305.
- Niederdeppe J, Gollust SE, Jarlenski MP, Nathanson AM, Barry CL. News coverage of sugar-sweetened beverage taxes: Pro- and antitax arguments in public discourse. Am J Public Health. 2013;103(6):e92–8.
- 24. Australian Government. Competition and Consumer Act 2010. Canberra: Australian Government; 2017 [cited 2018 Sep 7]. Available from: www.legislation.gov.au/ Details/C2017C00375
- 25. Joint Food Regulation System. Consultation regulation impact statement: labelling of sugars on packaged food and drinks Australia. Canberra: Commonwealth of Australia; 2018 [cited 2018 Aug 21]. Available from: foodregulation.gov.au/internet/fr/publishing.nsf/Content/ labelling-of-sugars-on-packaged-foods-and-drinks
- 26. Diepeveen S, Ling T, Suhrcke M, Roland M, Marteau TM. Public acceptability of government intervention to change health-related behaviours: a systematic review and narrative synthesis. BMC Public Health. 2013;13:756.

- 27. Hawkes C, Smith TG, Jewell J, Wardle J, Hammond RA, Friel S, et al. Smart food policies for obesity prevention. Lancet. 2015;385:2410–21.
- 28. World Health Organization. Consideration of the evidence on childhood obesity for the Commission on Ending Childhood Obesity: report of the ad hoc working group on science and evidence for ending childhood obesity. Geneva: WHO; 2016 [cited 2020 Mar 18]. Available from: apps.who.int/iris/bitstream/ handle/10665/206549/9789241565332_eng. pdf?sequence=1&isAllowed=y



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