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Commentary

Australia's sugar tale

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Abstract

Objective: To establish high intake of free sugars and its related disease burden as a significant public health challenge in Australia.
Design: We discuss five key actions to reduce intake of free sugars tailored to the Australian context. These strategies are informed by reviewing the global scientific evidence on the effectiveness of a range of policy responses to reduce intake of free sugars at the population level.
Setting: Australia.
Participants: Australian population.
Results: The five key actions to reduce population levels for intake of free sugars tailored to the Australian context include prioritising health in trade agreements and policy; introducing a fiscal policy supporting health and promoting food reformulation; regulating advertising and improving labelling; strengthening the current dietary guidelines; and encouraging healthy choices.
Conclusions: The adoption and implementation of the strategies discussed in the current commentary would aid in tackling the rising health burden from the intake of free sugars in Australia.

Keywords
Free sugars
Policy
Strategies
Australia

Chronic diseases are the major cause of preventable morbidity and premature mortality worldwide, accounting for 70 % of all deaths[1]. Excess intake of free sugars (all monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, plus the sugars that are naturally present in honey, syrups and fruit juices) is associated with increased risk of developing chronic diseases including dental caries[2,3] and obesity[4–7]. Sugar-sweetened beverage (SSB) intake is associated with an increased risk of developing type 2 diabetes[8–10]. Obesity is also causally linked to linked to heart disease and thirteen types of cancer[11]. Recognising this, the WHO set strong (<10 % of total energy intake) and conditional (<5 % of total energy intake) recommendations for daily intake of free sugars to improve oral and general health[12]. Many countries, including Australia, have not adopted these WHO recommendations to date[13].

Almost half of Australians exceed the <10 % and nearly 90 % exceed the <5 % intake of free sugars recommendations[14]. According to the Australian Health Survey 2011–2012, Australians on average consumed 57·8 (SD 1·4) g free sugars/d[14,15]. SSB are the largest source of free sugars for Australians[14]. The National Health Survey for 2014–2015[16] shows that 63·4 % of Australians are overweight or obese, nearly 1 million (4·4 %) have type 2 diabetes and three in every ten adults (25–44 years) have tooth decay (or dental caries)[17]. Despite a marginal decline in the intake of free sugars in the form of SSB[18], Australians are consuming free sugars above the recommended amounts. Collectively, this indicates that high intake of free sugars is a whole-of-population problem in Australia and that population-level interventions are required.

There is substantial international literature on the effectiveness of a range of policies to reduce high intake of free sugars in population diets. Sugar taxation (added and/or free sugars)[19] is one strategy that has now been implemented in many countries and states. Other policy

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strategies that are effective and being considered in many countries include limiting marketing of foods and drinks[20–24] containing high amounts of free sugars (above the recommended levels), labelling of added and free sugars, and subsiding fruits and vegetables[25–27] to promote uptake of healthy alternatives.

However, Australia is a different case. There is no political consensus to introduce a tax on added and/or free sugars or an SSB tax at the least, despite international evidence and economic modelling demonstrating the health and economic benefits for Australia[25,28–30]. There is widespread exposure to unhealthy food advertising and the current standards and codes that govern food advertising are largely industry regulated[31,32].

Below we discuss five key approaches to reduce intake of free sugars at the population level tailored to the Australian context.

1. Include health in trade and policy

For Australia to maintain its public health leadership in the world, it is vital to ensure that all trade and investment agreements (such as the Trans-Pacific Partnership) are made in the country's best interests, including public health interest.

Recent disputes around tobacco suggest the potential risk that international trade and agreements create for domestic public health policy[33]. Several nations, including Australia, have recently been forced to defend their tobacco control policies against legal action raised by tobacco companies in international trade and investment. Australia's ongoing commitment to tobacco plain packaging laws[34] is a clear example where Australia successfully prioritised the health of its citizens in the face of enormous tobacco industry opposition. Trade and investment agreements must not prevent or deter Australia, or other countries, from implementing policies to protect the health of its citizens.

As the influence of the sugar industry is evident in Australia's investment policies[35], trade agreements involving added and free sugars must have protections for public health policy to create healthy environments for better health outcomes. It is vital to refocus policies from one that prioritises industry profits to an approach that gives adequate weight to health[36]. Profit-only negotiations gives large food corporations the power to weaken the government's ability to introduce and enact public health policies[37]. Furthermore, to improve confidence that public health will not be compromised, governments should make the trade negotiation process more transparent and open to public scrutiny.

2. Introduce a fiscal policy supporting health and promote food reformulation

Consistent with international evidence on the effectiveness of SSB tax[30,38–40], the Australian Government should implement a fiscal policy on the major source of free sugars, i.e. SSB. This could be the most effective and viable policy action to reduce free sugars consumption.

In addition to reducing SSB consumption, taxation also encourages manufacturers to reformulate their products by reducing free sugars content. For reformulation to be successful, it is essential that all manufacturers sign up for it. Reformulation has been reported in advance of a two-tiered taxation system in the UK, where beverages containing added sugars are taxed at a higher rate[41–43]. Tesco (a British multinational grocery and general merchandise retailer) reduced the added sugars content in its home-brand products[41]. The UK has also previously been successful with its salt reformulation strategy[44]. Similar reformulations have also occurred in France where Nestlé and Orangina Schweppes have reduced added sugars in foods and drinks[42]. Although evaluation of the effectiveness of these actions is currently underway, modelling studies of the cost-effectiveness of reducing the energy content of SSB has shown that reformulation is a promising strategy that would yield cost savings and long-term health gains for Australia[45]. A core objective of Australia's Healthy Food Partnership[46] (a joint alliance between Australian Government, the food industry and public health) is to 'support industry to reformulate their foods', hence the alliance has the potential to endorse food reformulations with authority and clarity. Setting clear food reformulation targets, aligned with the Australian Dietary Guidelines, would strengthen the impact of this approach, creating a healthier food environment[47].

3. Regulate advertising and improve labelling

There is evidence that ubiquitous marketing of unhealthy food products influences populations' food choices and consumption[48]. Coca Cola, PepsiCo and Schweppes spent nearly $AU 29·6 million, $AU 12·3 million and $AU 10 million, respectively, on media advertising in Australia in 2009[49]. Despite the presence of legislated children's television standards in Australia[50], television advertising of unhealthy foods (includes foods high in fat, sugar and salt) is largely governed by industry codes and self-regulation. Large proportions of children are routinely exposed to unhealthy food and beverage advertising[51]. There is a need for regulatory reform and increased government oversight to limit the volume and content of unhealthy food advertisements, especially for foods high in added and free sugars content. The Obesity Policy Coalition[52,53] has long called for a regulation to protect children from unhealthy food and beverage advertising. Sweden, Norway and Quebec (Canada) have passed laws restricting advertising directed at young children[54]. Experience from both Australia and overseas demonstrates that regulatory measures intended to curb children's exposure to

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unhealthy food and beverage advertising need to capture actual exposure and not just advertisers' intent, which is mostly subjective and vulnerable to exploitation.

Another potential point of policy intervention is food labelling laws. At present, there is no clear way for Australian consumers to determine the amount of added or free sugars in the foods and beverages they consume. Product ingredients must be listed on the package in descending order (by ingoing weight). When present, sugars are included in ingredient lists, but sugar goes by many names. Furthermore, nutrition information panels on Australian products describe total sugars only (grouping together, for example, sugars naturally occurring in dairy with added sugars). Transparency would be increased if Australia were, at a minimum, to require sugars in contents lists to be grouped, which is the case in Canada[55], and require added sugars to appear separately in nutrition information panels, as is now required in the USA[56].

WHO recommends the use of interpretive nutrition labels with simplified information on the front of packaged food. Australia and New Zealand employ a Health Star Rating (HSR) system; this is a government-endorsed front-of-pack nutrition labelling system that is voluntary. The HSR system assigns a rating from 0·5 (least healthy) to 5 stars (most healthy) based on the nutritional composition of the product. Limitations of the current algorithm allow many juices to be awarded 5 stars, despite being very high in free sugars. The HSR system is currently under review[57] and the handling of beverages high in free sugars, as well as added sugars compared with total sugars across all categories, is an important opportunity for improvement.

Internationally there are moves to require front-of-pack consumer warning labels about high sugar content (as well as salt and saturated fat). Chile requires warning labels for products high in added sugars[58]. Israel has passed legislation requiring the same from 2020[59] and other jurisdictions including Canada and Australia are currently reviewing the front-of-pack warning-style labels for products high in sugar. There is substantial room for improvement in Australia's interpretive front-of-pack labelling. A system is required that adequately takes account of free sugars, provides consumers with clear guidance on genuinely healthier options, gives a warning for high sugar and is mandatory to ensure universal application.

4. Strengthen Australian Dietary Guidelines

Although previously the recommendation to limit free sugars to <10 % of energy by the WHO report on *Diet, Nutrition and the Prevention of Chronic Diseases*[60] was briefly discussed in Australia's Nutrient Reference Values (2006)[61], the recommendation was not included the Australian Dietary Guidelines. The Australian Dietary Guidelines, last updated in 2013, advise Australians to 'limit intake' of foods and drinks containing added sugars[13]. Thus, it is time for Australia to review and update its evidence-based guidelines to include the WHO's recommendations on thresholds for intake of free sugars. Furthermore, emphasising limits on the intake of fruit juices is important given the high amounts of free sugars present in them and their high intake by the population[62]. Reviewing the guidelines every 5 years to ensure consistency with evidence is also desirable.

5. Introduce other measures to encourage healthier choices

There are multiple other important environmental drivers of free sugars consumption that should be considered as potential opportunities for intervention to reduce free sugars consumption. Improving the availability and uptake of water[63] as an alternative to drinks containing high free sugars by placing clean water fountains in and around large public places such as shopping malls and food courts is an opportunity. Replacing the unhealthy food with healthy alternatives in vending machines and food outlets within health-care, university and workplace settings is another measure to promote healthy choices[64,65]. Reducing exposures to sweet snacks at the checkout by removing and/or replacing them with healthier alternatives may positively influence food purchasing behaviours[66,67]. As mass media campaigns have been proven to change smoking behaviour[68–70], similar results could be achieved to reduce free sugars consumption[71–73].

Conclusion

In conclusion, the actions required to tackle high intake of free sugars must include a mix of strategies. Although these are discussed in the Australian context in the current commentary, these strategies are applicable worldwide. Key actions include: prioritising health in trade agreements and policy; introducing a fiscal policy supporting health and promoting food reformulation; regulating advertising and improving labelling; strengthening the current dietary guidelines; and encouraging healthy choices. For countries such as Australia, where free sugars are consumed above the levels recommended for prevention of non-communicable diseases, there is a need, first, to recognise that high intake of free sugars is a population problem and that it is modifiable. Second, with the understanding that population-based goals differ from recommendations for individuals, implementing a comprehensive, public health approach to tackle diets high in free sugars and promote overall healthy eating would be valuable. Third, given the evidence on the cost-effectiveness of population-level interventions, it would be effective and efficient to

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implement population-based strategies to reduce the intake of free sugars. Finally, keeping health in focus, the government along with community support can help create a healthier environment that facilitates and maintains good health for its population.

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