

# New Zealand Beverage Guidance Panel

## POLICY BRIEF: A Sugary Drink Tax for New Zealand

### CONSULTATION Document

*-for review*

**PURPOSE** - The purpose of this document is to highlight the urgency for placing a tax on sugary drinks (SDs) in New Zealand. This document will outline the effects and cost to New Zealand healthcare from high SD intake, along with the projected benefits for placing a tax on sugary drinks. The brief will also make recommendations for key stakeholders and settings to work collaboratively together to reduce SD intake, how nationwide and worldwide support for a SD tax has grown, and where the revenue generated from the tax could be used to help address the burden of childhood obesity and dental decay in New Zealand. These goals align to the vision articulated by the advocacy group 'FIZZ' to achieve a Sugary Drink Free New Zealand by 2025.

**Background** – The NZ Beverage Guidance Panel (NZBGP) was modelled off the US Beverage Guidance Panel (USBGP).

The USBGP was established by Barry Popkin, Professor of Nutrition, in 2006.<sup>1</sup> The intention of the panel was to develop guidance to government and community groups to limit the intake of sugary drinks (SDs), which had broad societal support from relevant interest groups. Since then, similar groups have formed in China, Mexico, Spain, the United Kingdom, and New Zealand.

This document is the second policy brief prepared by the NZBG. The first titled - Policy Brief: Options to reduce sugar sweetened beverage consumption on New Zealand was presented to parliament representatives on 19<sup>th</sup> June, 2014.<sup>2</sup>

*“The Beverage Guidance Panel was assembled to provide guidance on the rationale and structure of a sugar sweetened beverage tax.”*

## RATIONALE FOR A TAX ON SUGARY DRINKS

**DEFINITION of a Sugary Drink:** Any beverage that contains free sugars or other caloric sweetener. “Free sugars refer to monosaccharides (such as glucose or fructose) and disaccharides (such as sucrose or table sugar) added to foods and drinks by the manufacturer, cook, or consumer, and sugars naturally present in honey, syrups, fruit juices, and fruit juice concentrates.”<sup>3</sup> The main categories of sugary drinks include fizzy-drinks (carbonated), soft-drinks (including sachet mixes), fruit juices, cordials, flavoured milks, and energy/sports drinks.

### **1.1 Why target sugary drinks?**

Sugary drinks (SDs) are very popular in New Zealand (NZ), like many countries around the world. In NZ, SDs are a leading source of sugar in the diet of youth and the second leading contributor for adults.<sup>4,5</sup> Excess sugar intake increases the risk of developing unhealthy weight gain, type-2 diabetes, gout, non-alcoholic steatohepatitis and tooth decay.<sup>6-10</sup> A reduction in SD intake will reduce the likelihood of developing these conditions. Policy and regulatory controls on SDs are likely to be the most effective strategy to reduce intake.<sup>11-13</sup> Further, such policies are likely to be the most cost-effective.<sup>13</sup>

Studies have shown that energy consumed in beverages are not well compensated for by a reduction in food intake, meaning that they increase net energy intake.<sup>14</sup> A growing body of evidence shows that sugar and SDs have addictive characteristics among high intake consumers. Sugar has addictive-like properties and people coming off high sugar diets describe experiencing feelings of withdrawal similar to coming off other addictive substances.<sup>15-18</sup>

Sugary drinks are easily identifiable, are highly concentrated in sugar and a single product item that is the leading contributor of sugar to children and adults diet. These reasons provide a strong rationale for action to address them specifically.

### **1.2 Evidence of health effects of sugary drink consumption**

Since 2006, there have been at many systematic reviews of observational studies that have assessed the relationship between SD consumption, body mass index (BMI), unhealthy weight and related health consequences. The majority of these found a positive relationship between SD intake and unhealthy weight.<sup>19-24</sup> These reviews demonstrate a significant relationship between SDs consumption, raised BMI, the occurrence of 'unhealthy weight gain' and its related health consequences. Two Randomized Control Trials (RCTs) conducted by de Ruyter and Ebbeling found that masked substitution of SDs with sugar free equivalents compared to usual intake, resulted in significantly less weight gain and fat accumulation in the sugar free group.<sup>11,12</sup>

Intake of SDs increases the likelihood of developing type 2 diabetes mellitus, is a risk factor for cardiovascular disease, gout and dental caries.<sup>6-10, 19-30</sup> There is also increasing evidence that demonstrates a likely link between high SD intake and cancer, and impaired cognitive development.<sup>31,32</sup> We see that a high sugar diet is a form of malnutrition in which dental caries, unhealthy weight gain and type 2 diabetes are predictable results of such intake.

### **1.3 New Zealand's sugary drink consumption**

New Zealand's intake of SDs remains high. The most recent NZ national nutrition surveys show that SDs contribute 26% of sugar to the diets of NZ children and 17% of sugar to the diets of NZ adults.<sup>4,5</sup> Further, 29% of children consumed four or more SDs per week and was markedly higher for boys (33% as opposed to 24% for girls), Pacific (49%) and Māori (39%) children.<sup>29</sup> Oral health is directly impacted by high sugar and sugary drink intake and oral health is the leading cause in avoidable hospitalisations in pre-school children. Scragg et al using the 2002, National Children's Nutrition Survey found a positive relationship between SD consumption and BMI in children.<sup>30</sup> Children who drank more than one SD per day had a significantly higher BMI compared to those children that drank less than one SD per week (BMI: 19.7 verses 18.8 kg/m<sup>2</sup>).<sup>29</sup> Findings from the Obesity Prevention in Communities study showed that children who consumed more than one SD per day had a mean BMI of approximately 26.3 kg/m<sup>2</sup> compared to 25.3 kg/m<sup>2</sup> for non-regular SD drinkers.<sup>30</sup>

#### 1.4 How will sugary drink tax address childhood obesity?

A tax on sugary drinks is a simple initiative that is likely to reduce the burden of dental caries, unhealthy weight gain, and type 2 diabetes. A sugary drinks tax is a straightforward action that would demonstrate that the government is serious in its efforts to address childhood obesity. It will also raise the public's awareness into the harms that sugar and sugary drinks pose to health.

Currently, sugary drinks are abundantly available to the public, including school children. Further, the majority of beverages offered for sale to the public are sugary. Bottled water and zero sugar alternatives are often difficult to find and frequently unavailable. The introduction of a tax of sugary drinks is likely to have a number of benefits including:

- The cost of sugary drinks will increase
- Bottled water and zero sugar alternatives will be cheaper by comparison
- It will incentivise industry to reformulate their products reducing sugar content to avoid the tax
- New products from the industry are more likely to have a lower sugar concentration
- Increased availability of water and zero sugar beverages
- Enhanced public awareness of why sugary drinks are detrimental to health

#### 1.5 Where have sugary drink taxes been implemented and what has been their effect on sales?

- **Mexico** - In 2014, Mexico adopted a 10% SD tax that saw a 12% reduction in SD sales and a 4% increase in sales of bottled water.<sup>33</sup>
- **Berkley, USA** - In November 2014, Berkeley, California was the first US jurisdiction to pass a sizeable SD tax (\$0.01c/oz) designed to reduce intake rather than gather revenue. This saw a drop in sales of SDs by 9.6% and a 15.6% increase in sales of bottled water. Surrounding areas that did not receive the tax showed a 6.9% rise in sales of SDs for the same period indicating a 16.5% relative difference.<sup>34</sup>
- **Philadelphia, USA** - On 1<sup>st</sup> January 2017 Philadelphia brought in a \$0.015/oz SD tax. In some instances this more than doubled pre-tax prices (i.e. a gallon of sweetened tea that cost \$1.77 increased to \$3.69 because of an added \$1.92 in tax.) A 27% decline in sales followed the introduction of the tax.<sup>35</sup>
- **Seattle, USA – July, 2017**. The Seattle government passed legislation for a SD tax of \$0.0175c/oz. This excludes artificially sweetened beverages, also small companies are exempt whilst medium sized companies pay a reduced tax rate of \$0.01c/oz.<sup>36</sup>
- **United Kingdom** - In April 2018 the UK will introduce a 20% tax on SDs. Revenue has been tagged to double the funding for sports programmes in primary schools and is estimated at £520 million per year.<sup>37</sup>

- **Pacific Island Countries and Territories (PICTs)** - Thirteen of the 21 Pacific Island Countries and Territories that come under the auspices of the Secretariat of the Pacific Community (SPC) have some form of SD tax. Those of significance to impact behavior include:<sup>38</sup>

- Marshall Islands 16-23 cents
  - Vanuatu 16-23 cents
  - Tonga 16-23 cents
  - Cook Islands 24-32 cents
  - Tokelau\*
- \*Tokelau has banned sale of carbonated drinks

### 1.6 Who have recommended taxing sugary drinks to address obesity and dental health?

In 2016, the World Health Organization published a report by the Commission on Ending Childhood Obesity.<sup>39</sup> In this report, the second recommendation was to: **‘Implement an effective tax on sugary drinks.’** Other leading health groups and organisations in New Zealand have also called for a tax to address childhood obesity. They include:

- New Zealand Medical Association
- New Zealand Dental Association<sup>40</sup>
- 74 Health Professors in a joint letter to the NZ Minister of Health<sup>41</sup>
- NZ Public Health Association
- NZ Heart Foundation
- Toi Tangata
- Hapai te Hauora: Māori Public Health
- WHO Reports<sup>42,43</sup>

### 1.7 Increasing Public Support

Poll results in **SUPPORT** and **OPPOSITION** of a Sugary Drink Tax from February 2014 are highlighted in the table below.

	SUPPORT	OPPOSITION
Feb 2014 (Horizon Research Poll)	44%	49%
June 2015 (Horizon Research Poll)	52%	32%
March 2016(NZ Herald Poll)	83%	17%
April 2016 (Colmar Brunton Poll)	66%	21%

Since February 2014, the table shows that a strong increase in public support for a sugary drinks tax has occurred in New Zealand. The most recent poll shows the majority of New Zealanders support a SD tax.

Of similar significance is the level that opposition to a SD tax has fallen away. Initially, nearly half (49%) of those polled opposed a tax, (which clearly exceeded support). In April 2016, opposition dropped significantly. Over this 2 year period, opposition more than halved, reducing from 49% to 21%. Clearly these trends show that the New Zealand public strongly support a sugary drink tax and opposition is to the tax is at low levels.

### Summary

A tax on SDs is a reasonable and necessary policy that will contribute to reducing the burden of obesity, type-2 diabetes, tooth decay and a number of other diseases. A tax on sugary drinks will create an environment where healthier drink options are more attractive (in terms of cost) and more freely available to consumers. Taxing sugary drinks is a cornerstone policy in many countries around the world who are serious about the prevention of childhood obesity. In New Zealand, public support for a SD tax is strong – confirming that most New Zealanders support a tax on SDs to address childhood obesity.

## STRUCTURE OF A SUGARY DRINK TAX

With permission, many of the recommendations made in this section have been strongly informed by the paper authored by Professor Michael Littlewood in the New Zealand Law Journal.<sup>44</sup>

### 2.1 Who should pay?

We suggest that the tax be targeted specifically on manufacturers and importers of sugary drinks. This presents the simplest model to administer. Although it would be possible to design a tax to be paid by wholesalers and retailers there are far more of them in number. This would require far greater resource to design and administer a tax targeted to them. Already there are tax structures like this in place that target manufacturers and importers, which make this option attractive to the government. Such a tax would be cheap to administer and the cost of compliance would also be very low. Any tax imposed onto manufacturers and importers is likely to then be passed on to wholesalers and retailers, and finally to consumers.

Our recommendation:

- Manufacturers and importers should pay the tax

### 2.2 What should be taxed?

**Definition A** – Any manufactured beverage with free sugars. Free sugars refer to monosaccharides (such as glucose or fructose) and disaccharides (such as sucrose or table sugar) added to foods and drinks by the manufacturer, cook, or consumer, and sugars naturally present in honey, syrups, fruit juices, and fruit juice concentrates

**Definition B** – the tax be imposed on any packaged beverage product that has a free sugar content that exceeds 5g/100ml. These include carbonated beverages, cordials, 100% fruit juices, fruit drinks, energy drinks, sports drinks, iced coffees, ice teas and flavoured milks. New Zealanders are known to consume a high amount of fruit drinks and juices, to move from sugary soft-drinks to sugary fruit drinks and 100% fruit juices may negate any possible health benefits that underpin the reason for a tax – this is because fruit-drinks and 100% fruit juices have similar and in some instances higher sugar content than typical soft-drinks. Opposition to the inclusion of 100% fruit juices and flavoured milks in the tax is likely as they provide some vitamins and minerals that are beneficial for health and we therefore offer a less encompassing suggestion as an alternative.

**Definition C** – A tax be imposed on any packaged beverage product that has a sugar content that exceeds 5g/100ml in free sugars. These include carbonated beverages, cordials, fruit drinks, energy

drinks, sports drinks, iced coffees, ice teas and flavoured milks. However, 100% fruit juice products would be exempt.

### 2.3 What should the rate of tax be?

Rather than an ‘**ad valorem**’ tax which literally means ‘according to the value’ and is usually expressed as percentage, we recommend a ‘**per unit**’ tax which recommends a nominated amount per unit – for example, one dollar per litre. US cities of Berkley, Philadelphia and Seattle have recently implemented or are planning to adopt per unit taxes of US\$0.01/oz and US\$0.015/oz and US\$0.0175/oz respectively. This type of tax is more likely to have the desired effect (an increased price to prompt behavior change) regardless of whether a sugary drink is a well-known brand (and generally more expensive) or a cheaper generic version. Another advantage that a ‘per unit tax’ has over an ‘ad valorem tax’ is that it would be cheaper and easier to administer.

We offer **TWO** tax rate options including:

**Option 1 – NZ \$1 per litre unit tax** be set as the rate for a SD tax. This amount would be enough to discourage consumption, without being wholly prohibitive. With this tax in place, a standard 355ml can of soft-drink would increase in price by 35cents. Further, a 1.5L soft-drink would be subject to an additional \$1.50c tax. A budget brand 1.5L soft-drink that sells to \$1 would therefore be subject to a 150% price increase, moving its price from \$1 to \$2.50. In comparison to rates used in the US the rate proposed here of NZ \$1 per Litre is equal to that used in Philadelphia of 1.5c /oz.

**Option 2 – NZ 50 cents per litre unit tax** be set as the rate for a SD tax. This amount would be enough to discourage consumption, without being too prohibitive. With this tax in place, a standard 355ml can of soft-drink would increase in price by 18 cents. Further, a 1.5L soft-drink would be subject to an additional 75c tax. A budget brand 1.5L soft-drink that sells to \$1 and would therefore be subject to a 75% price increase, moving its price from \$1 to \$1.75. The rate proposed here of NZ 50c per Litre would be lower than those used in the US being equal to that used in 0.75c /oz.

### Summary

#### Recommendations for a Tax on Sugar Sweetened Beverages

- Tax be targeted to manufacturers and importers
- All beverages with sugar content exceeding 5g/100ml be subject to tax (Definition B - 100% juices and flavored milk included)
- Tax be a ‘per unit tax’ rather than a ‘ad valorem tax’
- Tax rate be ideally set at \$1 per liter or \$0.5 per liter

## REVENUE

## How much revenue could be generated from a sugary drink tax?

Estimates of revenue that have been projected using consumption volumes (2017 data) and price per litre (2016 data) of relevant drink categories in the New Zealand market from Euromonitor,<sup>45</sup> and the proportion of each drink category eligible for tax by using published data on sweetened and unsweetened beverage availability and sugar content in New Zealand and have taken into account price elasticities. These estimates are approximate, and equally plausible assumptions could result in varying estimates.

Beverage categories included in these estimates have tried to stay as close to those described in Definition B and C and includes carbonated drinks, juices, sports and energy drinks, bottled waters, and ready-to-drink (iced) teas and coffees. Flavoured milks were not included because of the lack of readily available consumption data for this category, so if included in would increase this revenue.

If the rate presented in **Option 2** of **NZ 50 c /L** is used we estimate that the total revenue gathered for a tax of \$50cents per liter on all sugary drinks with greater than 5g of sugar per 100ml (Definition B) in a single year would be approximately **\$100 million**. If 100% fruit juices were excluded (as in Definition C) tax revenue is estimated to be **\$65 million**.

## EARMARKING of SUGARY DRINK TAX REVENUE

- Provision of better infrastructure to support availability of sugar free alternatives such as water fountains in which kids/adults work, learn, live and play
- Facilitate initiatives to work with schools in challenged areas to enhance better nutrition at school
- Promote more sports in schools, displace beverage and food industry sponsorship agreements in youth sporting ventures (in both school and club settings)
- Fund a national roll-out of Healthy Families New Zealand. Note current cost is \$10 million per year for a quarter of the NZ population. A further \$30 million per year is needed to grow this initiative allowing national coverage.
- Ensure funds are used to support Sustainable Development Goals (SDGs) as identified by the United Nations.<sup>46</sup>

## OTHER CONSIDERATIONS OF A SUGARY DRINK TAX

### **3.1 Regressive considerations**

Those that oppose a sugary drink tax say it will disproportionately impact on poorer communities. However, the health complications of high sugary drink intake are significantly more regressive and these diseases disproportionately impact on poorer communities. A tax that will address part of this imbalance and is therefore a progressive measure. Furthermore revenue from a SD tax could create new programmes to promote child health and well-being in challenged communities. Sugary drinks are not a necessary in a healthy balanced diet and deliver empty calories with little or no nutrition. There are many other options here in New Zealand including readily available high quality tap-water as a no-cost alternative. For these reasons a SD tax is not regressive as it would reduce health inequities.

### **3.2 Employment considerations**

Industry and other opposition to a SD tax make the assertion that any type of SD tax will cause people to lose their jobs. However, as there are many industry owned alternatives that comprise an increasing proportion of any beverage manufacturers portfolio this is unlikely to be significant. A tax will incentivize the beverage industry to develop more zero sugar drinks and reformulate their current products – reducing their sugar content to avoid any added tax. When considering the cost to our health system that high sugar diets have – this argument is flawed. Obesity and nutrition related disease cost our health system alone in excess of \$1 billion per year. High sugar intake and sugary drink intake is a significant contributor to these issues.

### **3.3 The law**

Currently our Customs and Excise Act 1996 provides guidance for taxes on liquor, tobacco and fuels. A tax on sugary drinks could easily be incorporated in this Act. This would mean that the tax would be an excise duty (a tax on the sale of specified classes of goods manufactured within a jurisdiction) and also called an “excise equivalent duty” (in effect, the same as an excise duty on imports).

### **3.4 Administration**

The taxes provided for by the Customs and Excise Act (that is, the taxes on liquor, tobacco and fuels) are administered by the Customs Service — which could easily administer a tax on sugary drinks also. A tax on sugary drinks would be very similar to the taxes on liquor, tobacco and petrol, and would not present any difficulties of administration.

### **3.5 Exemption**

For very small scale manufacturers and importers it would be reasonable to provide an exemption from such a tax. For example, a manufacturer of small quantities of fruit drinks to be sold at a festival of sorts. It would be appropriate to exempt such a producers from the tax because to require them to pay would be unreasonably expensive considering likely costs of administration and compliance. We suggest that the threshold be the same as that for GST, \$60,000 per annum. This would mean that a producer whose business is less than the GST threshold of \$60,000 per annum would not need to pay any sugary drinks tax.

### **3.6 Sugary drinks tax and GST**

Already sugary drinks products are subject to GST. Added a new sugary drink tax would mean that they are then taxed twice. Double taxation is objectionable as it alters the behaviour of both producers and consumers. However, this change in behaviour of both manufacturers' and consumers' is its purpose. The same situation occurs with taxes on liquor, tobacco and petrol that result in double taxation.

## Summary

The proposition a tax on sugary drinks be adopted is not new or novel and is becoming standard practice in many parts of the world. The health benefits of reducing sugar intake provide compelling reasons for why a tax on sugary drinks is necessary. In this document a number of suggestions have been made on the structure, rate and administration of how such a tax may be achieved relatively easily in New Zealand.

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