



Research note

# How to win the war on sugar

By Fahad Ijlat Nizam

Foreword by Datuk Prof Dr Mohd Faiz Abdullah

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## ISIS Malaysia

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## Contributor

**Fahad Ijlal Nizam** is a researcher in the Economics, Trade, and Regional Integration programme. One of his research interests is human capital movement, with past work examining the lasting effects of colonialism on modern brain drain in developing nations. Driven by a deep passion for human behaviour and its impact, he attempts to integrate behavioural economics principles into the development policy landscape.

## Foreword

Sugar, once a luxury reserved for emperors and elites in ancient China, and as late as the 18<sup>th</sup> century, has today become ubiquitous and inescapable. Across the globe, excessive sugar consumption – and its attendant maladies – has become a defining feature of modern life. And with modern excess, come modern consequences. In this regard, Malaysia occupies an ignominious position among ASEAN member states: first in diabetes prevalence and second in obesity.

But beyond the sins of the saccharine sort, this is ultimately a public policy challenge. Malaysia's relationship with sugar has long been shaped by cultural indulgence, economic convenience and legacy policy contradictions. While we rightly celebrate a rich and diverse culinary heritage, we must also reckon with the unintended cost of abundance, including mounting pressure on our healthcare systems and public finances and, more crucially, its effects on the health of Malaysians.

This research note lays an initial foundation, examining how health, economics and behaviour intersect to shape national outcomes. It identifies legacy issues in Malaysia's sugar policy landscape and charts a constructive path forward, grounded in evidence and informed policy design.

This note reminds us that the fight against non-communicable diseases cannot rely on good intentions alone. As Sun Tzu reminds us in *The Art of War*: "Victorious warriors win first and then go to war, while defeated warriors go to war first and then seek to win." This means that in the war against excessive sugar consumption, victory hinges only on the choice to win first – by shaping policy, incentives and behavioural environments.

### **Datuk Prof Dr Mohd Faiz Abdullah**

Executive Chairman

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## Executive summary

- **Malaysians are consuming sugar at dangerous levels – roughly double the World Health Organisation’s stricter recommendation of 25g/day.** Although it is not the sole driver, it remains a major contributor to the country’s unhealthy population. Indeed, Malaysia’s obesity and diabetes mellitus rates are high and rising – recording among the highest prevalence in Southeast Asia in 2022 (Section 1).
- **Presently, the sugar-sweetened beverage (SSB) tax and Healthier Choice Logo (HCL) are two main policies aimed at reducing sugar consumption.** However, there are several weaknesses and gaps – including limited short-term impact, weak price signal, structural flaws, advertising overload and flawed behavioural nudges (Section 3).
- **We explore several policy proposals, organised into economic policy approaches and behavioural policy approaches** (Section 4).
- **On economic policy approaches, reforming the SSB tax and sugar subsidies could increase impacts on sugar consumption** (Section 4.1). Policymakers could explore a multi-year phase out of the refined sugar subsidy and restructuring the SSB tax towards an absolute sugar-based tax regime. Additionally, widening the tax scope to cover common sweetened substitutes like mamak drinks will help address substitution towards non-packaged drinks.
- **On behavioural approaches, fully utilising “nudges” could be a cheaper measure in the short term to reduce Malaysia’s sugar intake** (Section 4.4). To this end, fixing existing information nudges like HCL can finally make the label more accurate and nutritionally holistic. Additionally, designing more tax-salient pricing labels can complement the SSB taxes. Finally, amending the proposed advertising ban and introducing watershed restrictions alongside standardising low sugar levels in mamak beverages could help ensure that sugar regulation extends across all major consumption pathways.

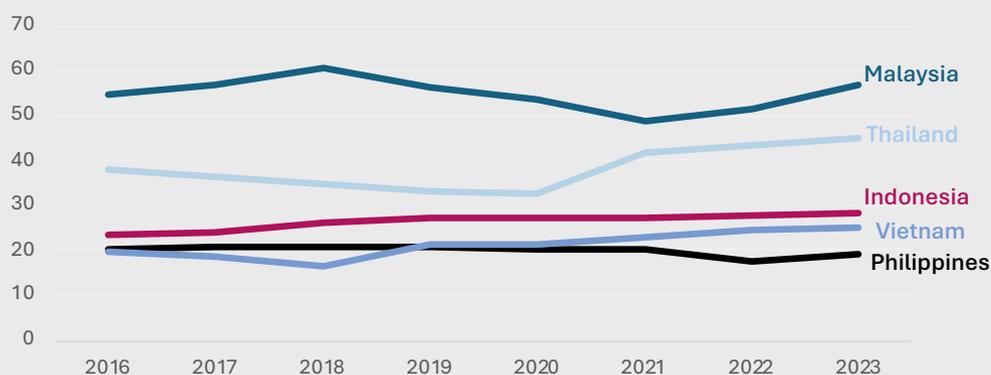
## 1 Background and literature review

**Sugar plays a significant role in Malaysian cuisine, with the average adult consuming 43g of sugar per day and adolescents consuming about 57g.<sup>1</sup>** This comes to 16-21kg of sugar each person per year – or about the weight of two standard car tyres. To put this into perspective, Malaysians consume nearly double the World Health Organisation (WHO) daily intake guidelines of below 25g per day.<sup>2</sup>

**A comparative assessment of sugar intake across ASEAN reveals that Malaysia has the highest sugar intake per capita (Fig. 1).** Including industrial use, Malaysia consumed about 57kg of sugar in 2023, 27% higher than Thailand (second highest) and about three times more than the Philippines.<sup>3</sup> Further, National Health and Morbidity Survey (NHMS, 2024) data show half of all sugar consumed comes from beverages. In other words, Malaysians drink as much sugar as they eat.<sup>4</sup> Our two primary sources of sugar-sweetened beverages are “freshly made” (such as Milo, teh tarik and 3-in-1 coffee) and “ready-to-drink” (packaged) beverages.

**Fig. 1. Malaysia consumes the most sugar per capita in ASEAN**

Sugar consumption of ASEAN member states (kg/year), including industrial use



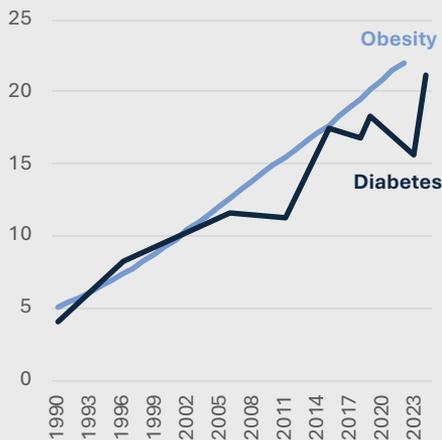
Source: author's illustrations based on Talha (2023)<sup>5</sup>

**Excess sugar consumption is associated with a large number of health outcomes, such as obesity, diabetes and heart diseases.<sup>6</sup>** This occurs directly through sugar metabolism, which drives fat synthesis, uric acid production and hepatic insulin resistance.<sup>7</sup> Indirectly, sugar's high palatability and low satiety promote excess caloric intake and weight gain, which also contributes to a higher risk of metabolic diseases.<sup>8</sup> One 34-year longitudinal study found that consuming two or more sugar-sweetened beverages daily was associated with a 21% higher risk of total mortality, including a 31% increase in cardiovascular deaths and 16% in cancer deaths – even after controlling for variables like diet and lifestyle.<sup>9</sup>

**Consequently, obesity and diabetes have risen steadily in Malaysia since the 1990s.** As of 2022, about one in five Malaysian adults is obese, while one in five lives with type 2 diabetes (Fig. 2). This places the country with one of the highest prevalences of both diseases among ASEAN member states at 22% and 21% for obesity and diabetes respectively (Fig. 3). This reflects a significant public health challenge characterised by lifestyle-related diseases that has persisted over decades.

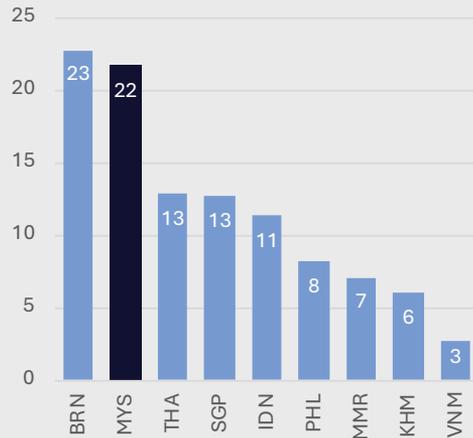
**Fig. 2. Malaysia’s diabetes and obesity rates have surged...**

Prevalence of obesity and diabetes in Malaysia (%)



**Fig. 3. ...and are currently among the highest in ASEAN**

Average prevalence of obesity and diabetes in ASEAN member states (%)

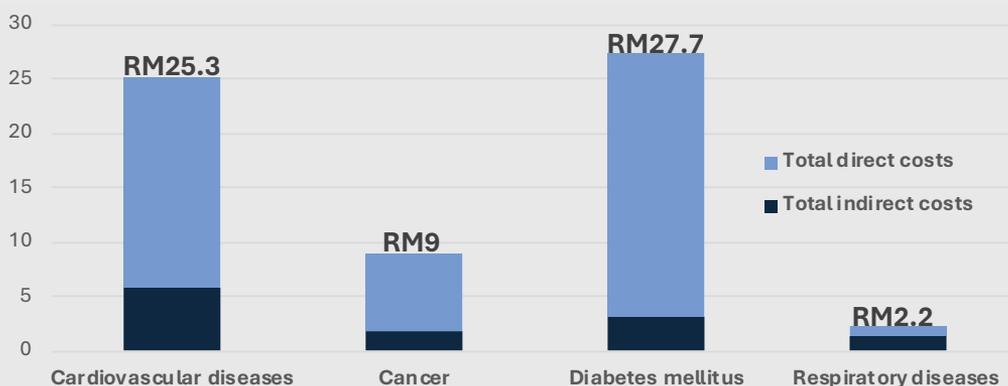


Source: author’s illustration based on WHO data (2023)<sup>10</sup>; Mustafa (1990), NHMS (1986, 1996, 2006, 2011, 2015, 2018, 2019, 2021, 2022, and 2023); and International Diabetes Federation (2025)<sup>11</sup>

**The sharp rise of these diseases could impose significant direct and indirect economic costs.** Direct costs here refer to the immediate financial burden associated with treatment, whether paid by individuals, insurance providers or the government. Whereas indirect cost is described as loss of productivity and inability to contribute to the workforce.<sup>12</sup> Fig. 4 shows the cost of four different non-communicable diseases (NCDs) in 2021 from which two main observations can be made. First, indirect costs made up the bulk. Second, diabetes mellitus is the most expensive NCD in Malaysia with about RM27.7 billion in economic losses – surpassing even cardiovascular diseases (CVD).<sup>13</sup> While premature deaths drove up the cost of CVDs, diabetes losses were driven by working at a reduced capacity. Both factors fall under indirect cost, underscoring the hidden losses of an unhealthy population.<sup>14</sup>

### Fig. 4. Indirect costs make up most of NCD economic losses

Economic loss of non-communicable diseases (NCDs) in Malaysia, RM billions, 2021



Source: author's illustration based on data from the World Health Organisation (2022)<sup>15</sup>

The total economic loss of all four NCDs amounted to about RM64 billion, which is equivalent to more than double the Health Ministry's budget allocation in 2022 (RM32 billion).<sup>16</sup> Without policy action, this NCD burden could keep constraining fiscal space, diverting resources from prevention and other high-return development investments.

## 2 Malaysia's policy context

In response to this growing public health concern, Malaysia has introduced two main policy approaches: the Healthier Choice Logo (HCL) and sugar-sweetened beverage (SSB) tax. Each seeks to curb sugar consumption by targeting consumer and industry behaviour. In that regard, this section outlines the goals, characteristics, and mechanism of these policies.

In 2017, the Health Ministry implemented an informational nudge policy called the "Healthier Choice Logo" (HCL).<sup>17</sup> Its primary intent was to advise Malaysians on which drinks were "healthier", empowering consumers to make sound health decisions. The nudge followed a simplistic binary approach, with ready-to-drink beverages on the shelf either bearing the sticker or not. Importantly, the HCL sticker had only one criterion – the sugar content of beverages must not exceed 5g/100ml. Once qualified, companies may apply to have the label incorporated into their packaging (Fig. 5). Since its implementation, a total of 638 drinks have attained HCL.<sup>18</sup>

## Fig. 5. Healthier Choice Logo (HCL)

Latest designs, 2025



Source: Ministry of Health (2025)<sup>19</sup>

Following HCL, the SSB tax, commonly known as “soda tax”, was implemented in July 2019.<sup>20</sup> It was among the major policy efforts implemented to curb excessive sugar consumption of Malaysians.<sup>21</sup> Initially, the tax enacted a 40 sen/litre on a range of ready-to-drink beverages (Table 1), if the sugar exceeded the threshold of 5g/100ml.<sup>22</sup> Then in 2022, the scope of the goods levied expanded to include pre-mixed beverages, such as “2-in-1” tea, coffee and cocoa products.<sup>23</sup> The tax was later increased to 50 sen per litre with plans to raise the levy by 80% to 90 sen per litre.<sup>24</sup>

**Table 1. SSB tax follows a volumetric tax structure**

Category	Sugar threshold	Excise duty rate (per litre)	Examples
Fruit and vegetable juices	12g/100ml	50 sen	Orange juice
Carbonated beverages, non-alcoholic drinks, except for animal-based milk products	5g/100ml	50 sen	Soda, energy drinks
Milk-based drinks	7g/100ml	50 sen	Flavoured UHT milk-based drinks
Pre-mixed beverages (e.g., 2-in-1, 3-in-1)	33.3g/100g	50 sen per 100g	3-in-1 coffee, chocolate malt drinks

Source: Royal Malaysian Customs Department (2024)

**There are two important characteristics of the SSB tax.** First, the nature of the threshold creates a tax-exemption zone below 5g/100ml. The tax seeks to increase prices, disincentivising the consumption of sugary beverages, while encouraging reformulation of sugary drinks. Although the threshold varies by category, the tax rate remains constant (Table 1). Second, the SSB tax follows a volumetric tax structure, meaning eligible drinks are taxed based on volume. In other words, higher taxes are imposed on larger drinks compared with smaller ones (Table A2 in the appendix for a breakdown of how the volumetric tax is calculated). Consequently, these features define how the SSB tax influences both consumer behaviour and industry response.

**Together, the two policies form a classic carrot-and-stick approach – the tax incentivises firms to reformulate, while HCL acts as a reward for compliance.** As the two policies share eligibility criteria, they triggered a mass reformulation of drinks with major industry players, such as Nestlé, Power Root Bhd and Fraser & Neave Bhd (F&N), reporting that most of their products now fall below the taxable limit.<sup>25</sup> Although most drinks are now untaxed, hence, cheaper – they contain less sugar than before. Recent reforms proposed in 2025 are examined in Section 3, where analysis reveals structural shortcomings that hinder their overall effectiveness.

### 3 Discussion and gaps

**Malaysia’s overall sugar regulatory landscape represents a good start in addressing its overconsumption of sugar.** However, the present policies are with limitations as deeper analysis reveals several gaps causing the policies’ initial win to be short-lived. Therefore, this section looks at the problems with the current sugar policies.

#### 3.1 Issues with SSB tax

**The SSB tax’s impact appears limited, partly because of a weak price signal.** On the price effect, the demand for taxed drinks is inelastic, with research suggesting a 10% increase in SSB reduces purchases by only about 1.7%.<sup>26</sup> Using pre-tax data, another study estimates that the 40 sen per litre levy would lower SSB volumes roughly 9.25%, all else equal.<sup>27</sup> Taken together, these point to modest reductions in taxed drink by volumes, advocating a minor gain for overall sugar reduction.

**Structurally, the weak price signalling stems from the volumetric tax system, which generates uneven price increments across product sizes.** According to the World Bank, SSB taxes should be increasing retail prices by 20% at a minimum.<sup>28</sup> For example, a 320ml tax eligible drink priced at RM1.54 before tax should be taxed at least 31 sen (20% increase from the original price). However, based on calculations in Table 2, we observe that beverages are taxed depending on their volume – with taxes shrinking in tandem with drink sizes. This inadvertently incentivises consumers to purchase smaller servings, which are more affordable and accessible, rather than reducing overall sugar consumption. A microsimulation study, which compared the efficacy of each sugar tax structure, found that the volumetric version had the weakest health and economic impact, mainly because of its weak incentive for industry players to reformulate drinks.<sup>29</sup> The appendix provides a breakdown of how Malaysia’s SSB tax fares against other countries (Table A1).

**Table 2. Smaller drinks, smaller taxes**

Volume	Sugar	Before tax	Sugar threshold	Sugar threshold
1.5l	75g	3.15	75 sen	23.81%
500ml	25g	2.20	25 sen	11.36%
320ml	16g	1.54	16 sen	10.75%

*Source: author's calculations based on data from Lotus (2025)<sup>30</sup> and parameters set by the World Bank (2020)*

**Even if consumption of taxed SSBs declines, consumers and firms can shift towards untaxed sugar alternatives.** While manufacturers can reformulate, ensuring their products fall below the tax threshold, consumers can switch to freshly prepared beverages (e.g. Milo, teh tarik or air balang) or other untaxed sweetened items. This issue is exacerbated by Malaysian consumption patterns whereby an adult consumes 7.3 self-prepared SSBs a week compared with 4.6 servings of ready-to-drink SSBs.<sup>31</sup> Consistent with this, Malaysia's per capita sugar consumption remains the highest in ASEAN even after the tax (Fig. 1). Overall, the current rate and scope are unlikely to deliver a large reduction in national intake.

**This limited impact can also be attributed to the contradictory sugar subsidy and sales tax exemption.** Despite abolishing sugar subsidies in 2013, Malaysia's long-standing price caps – set below production costs and regional import prices have compelled the government to reintroduce RM1/kg incentive payments to manufacturers since November 2023.<sup>32</sup> But maintaining the subsidy is costly for Malaysia's health and finances. An estimated RM500-600 million annually is spent to sustain artificially low prices.<sup>33</sup> Ironically, the revenue generated from the SSB tax, which is roughly RM358 million per year, helps fund this subsidy.<sup>34</sup> In 2025, the Ministry of Finance announced that refined sugar will remain tax-free under the revised sales and service tax (SST).<sup>35</sup>

**Finally, the tax-free zone of 5g/100ml may render future tax rate revisions redundant.** Having reformulated most of their products to fall below the prescribed threshold, most firms would remain unaffected in the event of a tax hike. This undermines the tax's long-term leverage over industry behaviour and weakens its capacity to drive major reductions in sugar consumption. Hence, the threshold exemption acts as a potential policy loophole, limiting its relevance and impact over time.

### 3.2 Issues with Healthier Choice Logo

**HCL is backfiring as a behavioural nudge and promoting a distorted understanding of health.** This issue stems from its simplistic criterion of a single sugar threshold of 5g/100ml, which saw mass reformulation to avoid the SSB tax. As a result, most drinks now fall below this threshold. Carbonated drinks, such as F&N strawberry, A&W root beer, Pepsi, Mountain Dew, F&N Sarsi and Kickapoo, all still laden with preservatives, flavouring and artificial sweeteners but certified as “healthier” (Fig. 6).

**Fig. 6. A ‘healthier’ choice?**

Sugar-sweetened beverages which carry HCL



*Source: author's photographs based on in-store survey of drinks in Malaysia*

**HCL's binary nature further limits its usefulness as it prevents meaningful cross-product comparability.** For instance, drinks in Fig. 6 all carry an HCL logo while Coca-Cola regular does not, despite both being fast-food beverages. This creates a misleading impression that one is “healthier” simply by virtue of the label. A similar issue arises when comparing two HCL-labelled drinks, does the label imply both are equally healthy or one is “healthier” than the other? As a result, these ambiguities risk confusion, potentially limiting the effectiveness of the logo to promote healthier dietary choices.

**In October 2025, the Health Ministry announced its plan to implement Malaysia's new nutri-grade system, but this measure still relies purely on sugar content.** It was described as a multi-grading system, labelling drinks with grades “A to D” based on their sugar concentration. This was, indeed, a step in the right direction but focusing solely on sugar content fails to account for the wider nutritional value of a drink. For instance, it fails to capture the absence of

beneficial nutrients, presence of artificial additives and nutritional void of these reformulated products. This is evident as HCL-approved drinks under Singapore's nutri grade were labelled "B" but the more rigorous European nutri-score algorithm, which considers nutrients beyond just sugar, calculated that these same beverages would earn a "D".<sup>36</sup>

**Compounding this misperception of health is the lack of regulation of SSB advertisement.**

Systematic reviews have found that receptivity to beverage advertisements is directly associated with increased SSB consumption<sup>37</sup> – suggesting that highly receptive individuals consume 48% more SSB servings.<sup>38</sup> An overexposure to advertising can activate psychological pathways through positive brand associations, increasing receptivity to marketing messages and diminishing perceived harm.<sup>39</sup> Thus, it could prime consumers towards unhealthy food choices, including sweetened beverages.<sup>40</sup>

**Children and adolescents are the most vulnerable to advertising overload.**

The reason being that their cognitive control systems are still developing, making them more sensitive to reward systems and naturally more susceptible to marketing cues.<sup>41</sup> An example of this is the strong association of sugary drinks like Milo with sports, suggesting that the product enhances sporting performance. There is some truth to the claim with Milo's contents of malt, milk and cocoa providing energy to fuel physical activities. This, however, does not alter the fact of its high sugar content of up to 9.5g for every 30ml of Milo – about 6.3 times the sugar limit of 5g/100ml.<sup>42</sup>

**While the Health Ministry enacted an advertisement ban for drinks containing more than 10g of sugar per 100ml, it could have minimal impact.**

This is because most currently advertised drinks (reformulated) already sit below the sugar threshold and are exempted anyway. All the "healthier" drinks in Fig. 6 can still be advertised under this new ban. Worrying, product line variations create enforcement grey areas. For example, Mountain Dew Blue Shock (12.4g/100ml) would be banned while Pitch Black (4.9g/100ml) remains advertised under the same brand – thus, creating loopholes that could weaken the ban's effectiveness.

**Despite recent reforms, undeserved "healthier" options remain widely advertised – distorting the public's understanding of a healthy diet.**

A survey conducted by the ministry found that 80% of respondents believed the HCL recommendations were "reliable and trustworthy".<sup>43</sup> As such, Malaysia must amend these policies before more are misled into viewing nutritionally poor products as genuinely healthy.

## 4 Policy recommendations

This section highlights two complementary policy approaches. The first outlines a direct economic approach, which involves the gradual removal of the sugar subsidy, transitioning from a volumetric into an absolute tax system, and expanding the tax towards condensed milk. Complementing this with behavioural policies, such as a more nutritionally holistic multi-dimensional grading system like nutri-score, amending the advertising restrictions and standardising reduced-sugar levels in mamak drinks, would also assist in curbing sugar intake on a broader scale. Indeed, the solution lies among the mix of both measures, as focusing on economic policy alone risks increasing cost-of-living pressures.

## Economic policy approaches

### 4.1 Phasing out of sugar subsidy

To make any meaningful progress in reducing national sugar consumption, the government must first address its contradictory subsidy policy. The most urgent reform must begin with the removal of the subsidy. Understandably, many governments fear public backlash over ending subsidies. However, the reality is that decisive action is needed as Malaysia can no longer sustain the sugar subsidy because of worsening health outcomes, financial strain and economic losses.

**Fig. 7. Reducing subsidy 20 sen annually for five years**



Source: author's illustrations

Note: The market price of coarse sugar is RM3.85/kg and the subsidised price is RM2.85/kg

A sustainable and feasible approach would be to implement a multi-year phase out of the subsidy – reducing the subsidy by 20 sen annually over five years (Fig. 7). By gradually increasing prices, not only would it allow ample time for manufacturers and industry players to adjust to new prices but more importantly, it would soften the financial blow for consumers. Case studies from Indonesia, Egypt and India have shown that incremental policy reforms like this have been effective in both public and political buy-in.<sup>44</sup> In a situation where a more modest approach is needed, extending the timeline to 10 years at 10 sen per annum can also be considered. From a savings standpoint, every 20 sen increase leads to estimated savings of RM100-120 million annually.<sup>45</sup> As such, this method can be regarded to be the best of both worlds for both implementation and health outcomes.

## 4.2 Transitioning to an absolute sugar-based tax structure

Simultaneously, Malaysia should explore the possibility of restructuring from a volumetric to an absolute sugar tax system. An absolute sugar tax structure taxes every gramme of sugar in a product, aligning monetary costs with health harms. The microsimulation study cited earlier found that tiered or absolute sugar content taxes could generate the greatest health and economic benefits.<sup>46</sup>

Even a modest rate of 2 sen per gramme would ensure that all sizes of SSBs meet the recommended standard of a minimum of 20% increase in retail price (Table 3).<sup>47</sup> Higher volume drinks would also be taxed significantly more – discouraging bulk consumption.

**Table 3. Tax of 2 sen per gramme of sugar aligns with World Bank standards**

Volume (ml)	Sugar	Before (RM)	Tax (RM)	% increase from tax
1,500	75g	3.15	1.50	48%
500	25g	2.20	5 sen	23%
320	16g	1.54	32 sen	21%

*Source: author's calculations*

This restructuring would also increase revenue. Consumption of ready-to-drink SSBs stands at roughly at 1.9 billion litres a year.<sup>48</sup> Using an elasticity of -0.173 and assuming all litres contain 4.8g/100ml (below the current threshold) – the estimated annual sugar tax under the 2 sen rate would be RM1.68 billion. This figure represents a fivefold increase over current returns. Although such assumptions might not be a realistic post-tax scenario, it does give us an idea of the potential tax revenue. If the current tax-free threshold remains, the figure would be significantly lower.

Therefore, this new tax structure should lower the exemption threshold to 4g/100ml or remove it entirely – ensuring full coverage of the tax. This approach mirrors that of South Africa's SSB tax, which currently faces similar worsening health indicators (Table A1). Although the suggested measure represents the most aggressive mode of sugar tax, the monetary and health outcomes make it worthwhile.

### 4.3 Widening scope of taxable products

Taxing condensed milk may further capture mamak drinks within the policy scope, aligning the tax with Malaysian consumption behaviour. Currently, most beverages sold at mamak restaurants escape taxation as they are not pre-packaged and continue to benefit from the sugar subsidy. Therefore, widening the tax scope to include major sugar substitutes like condensed milk would not only strengthen the price signal across more products but also discourage consumers from switching to cheaper unhealthier alternatives. Broader taxation is essential if Malaysia is to curb its sugar intake and tackle the health costs.

## Behavioural policy approaches

### 4.4 Improving HCL for a more nutritionally accurate nudge

As established earlier, the Health Ministry has long recognised HCL's structural flaws and recently proposed the nutri-grade system, which grades solely on sugar content. This narrow focus overlooks the complex profiles of SSBs, allowing undeserving "healthier" products to earn a favourable B grade – further skewing the public's perception of health.

To improve further its rigour, Malaysia should consider adopting the scoring algorithm used in nutri-score – the European Union's version of a multi-grade labelling system (Fig. 8). While nutri-grade and nutri-score share similarities, both being a hierarchical system and nearly identical in appearance – they differ in grading methods. For instance, unlike using sugar as the sole criterion to determine the final grade, nutri-score is more precise as it uses an algorithm which aggregates negative nutrition (sugar/fat/salt/sweeteners) against positive nutrients (fruits/proteins/fibres).<sup>49</sup> While October's nutri-grade represents progress, integrating nutri-score's algorithm allows for a more robust and nutritionally accurate labelling system – addressing its foreseeable flaws. Table A.4. and A.5. provide a breakdown on nutri-score's grading system.

**Fig. 8. Nutri-score grades which HCL should replicate**

Grading scale A-E



Source: Antikwar (2024)<sup>50</sup>

Nutri-score's precision has demonstrated success in EU states, such as the Netherlands and France.<sup>51</sup> Using French shopping panel data, research showed higher progress in food sales for products with nutri-score A and B grades (+0.3 and +0.4 percentage points respectively), while sales of products with an E grade decreased by 0.5 percentage points.<sup>52</sup> Moreover, a more

comprehensive grading system induces competitiveness of producing healthier products as industries are forced to consider ingredients. A visible hierarchy of nutritional quality would create reputational and market pressure for producers to reformulate their products to achieve better grades. However, one limitation identified was that although the intervention influenced product selection towards healthier options, it had no impact on the quantity consumed.<sup>53</sup>

With nearly half of the Malaysian population already seeking label guidance, amending its informational accuracy will be crucial. Moreover, extending the labelling requirement to include unregulated mamak beverages would bridge the current informational gap between ready-to-drink and freshly prepared drinks, ensuring consumers can make fair comparisons across all beverage types.

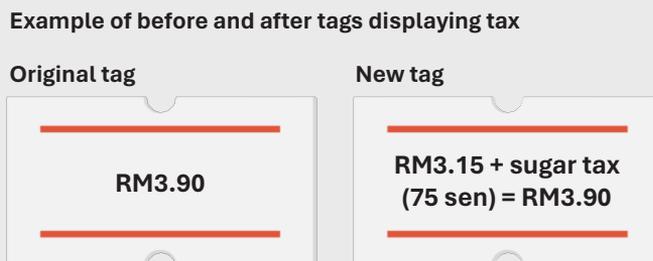
In terms of implementation, mandatory compliance is not needed as HCL previously saw high voluntary uptake. Similarly, it would induce a “race-to-the-top” environment, where companies compete not only on price and branding but also on health values. Achieving full coverage would be ideal, as it reinforces the credibility of the labelling framework while enabling healthier choices through better decision-making. Ultimately, amending nutri-grade’s criteria can improve the informative tool in addressing Malaysia’s dietary health crisis.

#### 4.5 Increasing saliency of taxed beverages

Currently, the tax is embedded in the final retail price of a drink, making the added value from the tax visually invisible to consumers. This may weaken the policy’s behavioural impact, as consumers are less likely to perceive a tax-induced price increase.<sup>54</sup> This limits the policy’s behavioural leverage as the lack of visible price differentiation leads to an underreaction to the policy’s intended behavioural cue.<sup>55</sup>

An effective policy measure would nudge consumer behaviour and one way is to increase the SSB tax saliency. An example to increase salience is to display prominently the added tax component on price tags (Fig. 9). One study found that explicitly displaying taxes at the point of purchase may further decrease demand by 8% on top of an initial fall in demand induced by price increases.<sup>56</sup> A follow-up study in the United States found supporting evidence that price tag messaging discouraged 30-40% of parents from purchasing sugary drinks.<sup>57</sup>

**Fig. 9. Increasing the SSB tax saliency**



*Source: author’s illustration based on Chetty et al. (2009)*

Mandating retailers to implement the proposed labels can serve as a practical yet low-cost tool to discourage excessive sugar consumption. Malaysia may consider piloting this approach, drawing on the outcomes of Chetty's study, while simultaneously advancing tax transparency. With that said, Malaysia would be the first country to introduce such a salient price nudge, with Chetty's experiment as the only precedent. Nevertheless, if executed effectively, this reform would not only serve as a complementary policy tool, but it would also enhance the behavioural impact of the tax. Ultimately, it ensures consumers directly perceive the true cost of sugary beverages.

#### 4.6 Cracking down on advertising

Prior to the October 2025 ban, the country relied on two voluntary policies – the Fast-Food Guideline (2008) and Malaysia Pledge (2013) – to regulate advertising of SSBs.<sup>58</sup> However, research shows the failure of these self-regulatory measures. Self-regulation relies on industries regulating themselves, which goes against their core commercial and profit-driven interests.<sup>59</sup> This was evident as the country saw a six-fold increase in fast-food commercials between 2012-22.<sup>60</sup> Given the strong persuasive power of advertising, regulations demand greater attention if the intention is to curb excessive sugar intake.

Indeed, Malaysia's planned ban on advertising for beverages with sugar content above 10g/100ml marks a transition to stricter governance. Yet, as detailed in Section 3, this measure may have minimal impact because of industry adaptation, giving leeway to "healthier" drinks like A&W root beer, Pepsi and Fanta.

There are two ways Malaysia can ensure the reform's effectiveness. One, Malaysia should harmonise its regulations – setting advertising, tax and labelling thresholds to 5g/100ml for all platforms. Not only does it allow for regulatory consistency but it will also widen the coverage to drinks lying between 5-10g. Complementing this, it should implement watershed restrictions that limit the airing of sugary drink advertisements to designated time slots. This measure protects the industry's sugary influence on more vulnerable consumers, such as children. Chile, for instance, bans advertising between 6am and 10pm, which reduced children's ad exposure by 73% and spurred significant industry reformulation.<sup>61</sup> Similarly, the UK's broadcast watershed, enforced with financial penalties, is expected to prevent tens of thousands of cases of childhood obesity and save the economy up to £2 billion (RM11 billion).<sup>62</sup>

Although mandatory restrictions would incur implementation costs, these represent genuine short-term costs and should be weighed against the long-term benefits of a healthier food environment. In this instance, gradual implementation would be optimal as it gives time to manage complexities, such as legislative development and industry resistance<sup>63</sup> – focusing on the unhealthiest products and working towards the threshold.

#### 4.7 Defaulting sugar in mamak drinks

Beyond the taxation of condensed milk, Malaysia could consider defaulting sugar levels in freshly made mamak drinks. Defaults are powerful behavioural nudges that, when utilised correctly, can induce immediate and strong behaviour changes. This is largely due to people's tendency to stick with the default option (status quo bias), even when better options exist, especially when preferences are at play.<sup>64</sup>

Recognising this, Singapore implemented the “siu dai by default” movement in 2023, which made “less sweet” drinks the standard option (default).<sup>65</sup> Restaurants were given siu dai kits containing measuring spoons to standardise sugar levels. Consumers could opt out if they preferred sweeter drinks.

In 2024, Malaysia piloted a similar campaign called “kurang manis” but it relied on voluntary opt-in behaviour. Even when offered small discounts (10-20 sen) for reduced sugar options, vendors reported that only one in 10 customers requested less sugar – indicating limited behavioural impact.<sup>66</sup> This emphasises the stickiness of the status quo bias despite the discounted price and underscores the importance of understanding behaviour for policy design and implementation.

Learning from this, Malaysia could re-introduce the “kurang manis” programme, amending it as an opt-out system instead. This could begin with the wide distribution of sugar measuring tools to participating outlets. As full coverage may be challenging, implementation efforts should prioritise large franchises, such as Pelita Nasi Kandar (28 locations) and Old Town White Coffee (more than 200 outlets), ensuring wide and consistent reach.<sup>67</sup> Ultimately, defaulting sugar levels could provide the government with a practical mechanism to regulate mamak drinks while addressing the substitution effect.

## Appendices

### Malaysian sugar tax v world standards

Based on World Bank data, there are 132 variations of the SSB tax implemented worldwide, including national and subnational specific policies.<sup>68</sup> Beginning with the tax instrument, SSBs globally range from four types of instruments – excise tax, import tax, GST/VAT and sales tax. Malaysia implements its SSB tax as an excise duty, meaning it is levied at the point of manufacture or import rather than at the final sale. Regardless of the taxation method, the cost is often passed on to consumers. Hence, a focus on comparing Malaysia’s threshold limit of 5g/100ml with other standards worldwide would be more informative.

Referring to the SSB tax database, out of the 132 tax models, only 21 include a sugar threshold (Malaysia included), implying a tax-free zone.<sup>69</sup> The rationale behind the tax-free threshold is health driven as they incentivise manufacturers to reformulate current products to reduce overall sugar consumption per drink.

Malaysia’s tax structure does share similarities on the threshold range of 5g/100ml as many have also anchored their sugar limits around 5g/100ml (Table 2). However, a noticeable difference is that while Malaysia applies a flat volume rate of 40 sen/litre, countries like the United Kingdom and Ireland utilise tiered volume rates. An upside of a tiered system is that it aligns tax burden with health harms (i.e. more sugar = more tax), making them more proportionate and politically defensible. In contrast, South Africa has taken the more aggressive approach with an absolute sugar content tax structure. A study concludes that tiered or absolute sugar content taxes could generate the largest health and economic benefits.<sup>70</sup> The volume tax design had the weakest impact on both in the long run because of insufficient incentive for industry to reformulate drinks.

**Table A1. Comparison of global SSB taxes**

Country	Tax type	Structure	Thresholds or tiers	Products
Malaysia	Volume	50 sen per litre	≥5g sugar/10ml (for ready-to-drink) ≥12g/100g (for premixed powders)	Carbonated, flavoured drinks and premixed powders
United Kingdom	Tiered	18 pence per litre (5-8g sugar/100ml) 24p/l (>8g sugar/100ml)	<5g: no tax 5-8g: lower rate >8g: higher rate	Soft drinks, excluding fruit juice, and milk-based beverages
Ireland	Tiered	16 cents per litre (5-8g sugar/100ml) 24 cents/l (>8g sugar/100ml)	Same as UK	Water- and juice-based drinks with added sugar
Mexico	Volume	1 peso per litre	Flat tax	Non-dairy sugary drinks, including sodas and flavoured waters
South Africa	Absolute sugar content	0.021 rand/litre per gramme of sugar above 4g/100ml	First 4g/100ml exempt tax applies to sugar beyond this threshold	All non-alcoholic beverages with added caloric sweeteners

Source: author's illustration. Data: World Bank SSB Tax (2025) <sup>71</sup>

## Volumetric tax structure calculations

Tax equation:

$$Tax(RM) = T \times V$$

and price after tax:

$$P_1 = P_0 + (T \times V)$$

where:

- $V$  = volume of drink in litres
- $T$  = tax per litre (50 sen)
- $P_0$  = price before tax (RM)
- $P_1$  = price after tax (RM)

**Table A2. As the volume of drinks shrinks, the taxable amount shrinks**

Volume (ml)	Sugar (g)	Before (RM)	Tax (RM)	% increase from tax
1,500	75	3.15	75 sen	24%
500	25	2.20	25 sen	11%
320	16	1.54	16 sen	11%

*Source: author's calculations based on SSB prices sold in Lotus (2025)*

## Mamak or freshly made drinks available in Malaysia

Table A3 is a detailed breakdown of the average sugar and calories present in freshly made drinks commonly sold at a mamak.

**Table A3. List of drinks served in a mamak**

Drink	Sugar content (g)	Calories
Teh tarik	26	177
Teh ais	30	189
Teh O limau ais/panas	30	118
Teh O	23	88
Teh C	17	169
Kopi	24	145
Kopi O	23	88
Kopi C	12	169
Nescafe	16	100
Neslo	24	149
Milo biasa	12	187
Milo dinosaur	38.2	294
Milo kosong	12.3	124
Horlicks biasa	27.5	190
Horlicks O	17.5	127
Limau ais/panas	30	118
Teh halia	12	74
Coconut water	14	55
Sirap bandung	32	152
Sirap	24	96

Source: author's illustration based on data from HealthWorks Malaysia (2021)<sup>72</sup>

## Nutri-score

Table A4 displays nutri-score’s grading of ingredients commonly found in ready-to-drink SSBs. Table A5 indicates the grading scale, translating raw aggregated scores into alphabetical grades.

**Table A4. There are more negative nutrients criteria than positive**

Negative nutrients (- points)			Positive (+ points)		
Energy	0 points ≤30kJ 10 points >390kJ	Non-linear allocation	Proteins	0 points ≤1.2g 7 points >3.0g	0.3g per point
Sugars	0 points ≤0.5g 10 points >11g	Non-linear allocation	Fibres	0 points ≤3g 5 points >7.4g	1.1g per point
Saturates	0 points ≤1g 10 points >10g	1g per point	Fruits, vegetables and legumes	0 points ≤40% 6 points >80%	Nonlinear allocation
Salt	0 points ≤0.2g 20 points >4g	0.2g per point	-	-	-
Non-nutritional sweeteners	Presence	4 points	-	-	-

Source: Nutri-score 2023 update (Merz, et al., 2024)

**Table A5. Nutri-score grading system, 2023**

Score	Grade
Water, 0	A
0 to 2	B
3 to 6	C
7 to 9	D
10 to max	E

Source: Nutri-score 2023 update (Merz, et al., 2024)

## Potential tax revenue calculations

Assumptions:

- Annual volume of ready-to-drink SSBs:  
 $Q_0 = 1.9 \times 10^9$ , *litre*
- Sugar content:  
 $4.8g \text{ per } 100ml = 48g \text{ per litre}$
- Tax rate:  
 $\tau_g = 2 \text{ sen per gramme of sugar}$   
 $\tau_l = 48 \times 0.02 = 96 \text{ sen per litre}$
- Elasticity of demand:  
 $\epsilon = -0.173$
- Price of a litre of ready-to-drink SSB:  
 $1 \text{ litre} = RM2.10$
- Full pass-through of tax to consumers

Equation:

Adjusting quantity consumed  $Q_1$ :

$$Q_1 = Q_0 \left( 1 + \epsilon \frac{\tau_l}{P_0} \right)$$

Thus, the approximate elasticity adjusted tax revenue is

$$TR_{adjusted} = Q_1 \tau_l$$

Calculation:

$$\begin{aligned} Q_1 &= 1.9 \times 10^9 \left( 1 + (-0.173) \frac{0.96}{2.1} \right) \\ &= 1.9 \times 10^9 (1 - 0.0791) \\ &= 1.7497 \times 10^9 \end{aligned}$$

Therefore,

$$\begin{aligned} TR_{adjusted} &= 1.7497 \times 10^9 \times 0.96 \\ &= RM 1,679,712,000 \end{aligned}$$

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