Implementing sugar-sweetened beverage taxes: Considerations for European policymakers

"Sugar, rum, and tobacco, are commodities which are nowhere necessaries of life, [but] which are ... objects of almost universal consumption, and which are therefore extremely proper subjects of taxation." (Adam Smith - An Inquiry into the Nature and Causes of the Wealth of Nations, 1776)

The present briefing has been written to support policymakers, civil society organisations (CSOs), and other stakeholders with the planning and implementation of sugar-sweetened beverage (SSB) taxes. It supplements the evidence provided by systematic reviews, cost studies, case studies and other resources and reports which have been compiled in the World Obesity Federation’s policy dossier, available here; a webinar hosted by World Obesity held in September 2018; and other reports that have been published on the topic. It presents a summary of the benefits of SSB taxes, provides an overview of a number of considerations that will support the planning for an SSB tax, and showcases some success stories from Europe in the form of case studies. More information can be found at https://www.worldobesity.org/resources/policy-dossiers/pd-1

INTRODUCTION

The global burden of non-communicable diseases (NCDs) and obesity is high, both from a societal and a financial perspective. The World Health Organization (WHO) recommends fiscal policies as a measure to influence dietary behaviour by promoting a change in the consumption of the taxed products.\(^1\) Taxes on alcohol and tobacco have proven to be a cost effective intervention for promoting health through behavioural change while having the additional benefit of generating revenue.\(^2,3,4\)

In 2017, WHO recommended that governments implement a 20% tax on SSBs to help reduce population sugar consumption and in turn reduce NCDs and obesity.\(^3\) This recommendation has been supported by a number of organisations and individuals around the world.
WHY SUGAR-SWEETENED BEVERAGES?

Free sugars have been associated with increased levels of obesity and NCDs. The most recent WHO sugar guidelines recommend a daily sugar consumption of less than 10% of daily total energy intake and suggests a further reduction to less than 5% per day. However, sugar remains a cheap and widely accessible product and as a result current global consumption of sugar is significantly above this threshold.

Given the established link between sugar consumption and NCDs, sugar taxes are increasingly identified as an important fiscal tool to promote health, alongside tobacco and alcohol taxes (STAX). SSBs in particular are considered a good target for a tax, as they have no nutritional value and contribute a large amount of sugar to the diets of populations around the world, particularly children. Studies have reported that children and young people in the United States consume nearly 11% of their daily calorie intake from SSBs.

WHERE HAVE TAXES BEEN IMPLEMENTED ACROSS EUROPE?

According to the NOURISHING database, by mid-2018, 39 countries around the world, and 8 jurisdictions in the U.S. had implemented a tax on SSBs. From these, nine are EU countries. Figure 1 highlights EU countries where the levy has been introduced, when it went into effect, the type of tax, and the amount at which it was fixed.
Figure 1. European countries with an SSB tax, the date of implementation, the type of tax, and the amount of the levy. Map source: https://mapchart.net/europe.html

**Norway**
- Implementation year: 1981, 2017
- Tax type: specific volumetric excise
- €0.22/litre for beverages with > 0.5% of sugar
- 3.34 Norwegian Kroner/litre

**Finland**
- Implementation year: 2011
- Tax type: specific volumetric excise
- €0.068 per litre

**Belgium**
- Implementation year: 2016
- Tax type: specific volumetric excise
- 7 forints/litre

**Hungary**
- Implementation year: 2011
- Tax type: specific volumetric excise
- €0.068 per litre

**Spain**
- Implementation year: 2017
- Tax type: specific content-based excise
- Drinks with <80g sugar/litre saw a price increase of €0.08/litre; drinks with >80g sugar/litre saw a price increase of €0.16/litre

**France**
- Implementation year: 2012
- Tax type: specific volumetric excise
- £0.11/litre; increased to £7.5 /100 litres in 2018

**Portugal**
- Implementation year: 2017
- Tax type: specific content-based excise
- Drinks with 5-8g of sugar/100ml saw a price increase of €0.20/litre; drinks with > 8g of sugar/100ml saw a price increase of €0.30/litre

**Ireland**
- Implementation year: 2018
- Tax type: specific content-based excise
- Drinks with 5-8g/100ml taxed at €0.20/litre; drinks with > 8g of sugar per 100ml taxed at €0.30/litre

**United Kingdom**
- Implementation year: 2018
- Tax type: industry levy
- Drinks with 5-8g of sugar/100ml saw a price increase of £0.18/litre; drinks with > 8g of sugar/100ml saw a price increase of £0.24/litre
BENEFITS OF SSB TAXES

As with other health-related taxes, a tax on SSBs can help improve population health and raise revenue for governments. Based on the evidence compiled in the policy dossier, Figure 2 summarises some of the key benefits of SSB taxes.

Figure 2. Benefits of SSB taxes

Changed consumer behaviour
- Studies consistently show that an increase in SSB prices leads to a decrease in consumption.\cite{4,8}
- In response to a 5% price increase in France, the sale of SSBs fell by about 3.3% between January 2012 and May 2012.\cite{11}
- Evidence from Mexico suggests that sales of SSBs declined by 5.5% in the first year of implementation and a further 9.7% in the second year.\cite{12}

Encourages industry reformulation
- Raising the price of SSBs will likely decrease the purchase of SSBs and discourage consumption.\cite{8} This can push companies to reformulate the content of their products and promote the consumption of lower-sugar alternatives in order to avoid the tax.\cite{4}
- Fiscal measure improves nutrition behaviours and literacy.\cite{12}
- In anticipation of the introduction of the tax, over 50% of UK manufacturers reformulated their drinks to ensure they fell below the threshold.\cite{13}

Raises revenue
- SSB taxation can have a beneficial effect on health while also raising revenue that can then potentially be earmarked for public health programmes.
- The implementation experience in France shows that the SSB tax generates approximately €280 million per year.\cite{11}

Improves population health
- Systematic reviews demonstrate the association between SSB consumption, increased energy intake and increased body weight.\cite{14,15,16}
- WHO identified SSB taxation as a 'Best Buys' effective intervention with a cost-effectiveness analysis >1$100 per disability-adjusted life year averted in low- and middle-income countries.\cite{17}
KEY CONSIDERATIONS FOR DESIGNING AND IMPLEMENTING SSB TAXES

In this section we highlight a series of considerations for policymakers, CSOs and other stakeholders when planning SSB taxes.

It should be recognised that while taxation provides an opportunity to reduce the consumption of SSBs and raise federal revenue, SSB taxes are just one important component of a package of integrated actions that are needed to address obesity. When planning an SSB tax, it should be taken into account that the effect of taxes on health behaviour will be greatest when implemented alongside other policy interventions.

1. **Designing the tax:** Based on World Obesity’s policy dossier and World Cancer Research Fund (WCRF) International’s first Building Momentum report,[4] Figure 2 highlights key considerations relating to the tax itself when developing an SSB tax. A foundational pillar for designing a robust tax is the compilation of evidence,[4] such as that provided through the dossier.

2. **Local context:** Considerations prior to the introduction of SSB taxes include looking at the prevalence of obesity, the consumption levels of SSBs, the baseline tax rate of the specific country/city, and behavioural patterns.[4,18] In addition, consideration should be given to the political context to ensure that the tax chosen is appropriate and relevant.[4]

3. **Understand the arguments:** It is important to look at the tax project from an industry perspective, identify loopholes, and ensure that the tax is designed in a way that is clear and enforceable.[4] Industry may use tactics to block the implementation of SSB taxes. Evidence from such tactics arose in Colombia with the civil organisation Educar Consumidores and their public health and communication campaign which highlighted the harmful effects of SSBs.[19] The campaign was launched on social networks, but when the spot aired on television, Postobón, a leading SSB company in Colombia, filed a lawsuit, after which Educar Consumidores had to remove all information regarding SSBs. See figure 3 for more information on designing an effective SSB tax. Public bodies, NGOs and other stakeholders should be consulted to help identify different views and perspectives.[4,20]
Figure 3. Designing an SSB tax

**What should be taxed?**
A tax could apply to sugar-sweetened sodas, flavoured milk, energy drinks and flavoured waters. The inclusion of non-caloric sweetened sodas in an SSB tax may also be considered. Including a wide range of products lowers the risk of consumers substituting from one high sugar product to another. Taxing products where healthier alternatives exist will likely have the most positive impact.21

**What level of sugar?**
Some countries use a nutrient profile to define what products should be taxed.4 This ensures that all stakeholders are aware of the reasoning behind the definition of taxed products.

**What type of tax?**
A specific tax is levied on the basis of product size or amount, while an ad valorem tax is a percentage of the product value. Following the experience of the implementation of tobacco and alcohol taxes, specific excise taxes may be more effective.

**What level of tax?**
While a 10% increase in price for the SSB can affect purchasing behaviours, the WHO recommends a minimum tax of 20% ad valorem.3 Modelling studies have also identified 20% as the most effective rate to reduce consumption of SSBs.

**Who should be taxed?**
To facilitate the implementation and collection, an industry levy may be easier to implement than a sales tax collected from retailers.4,10

**How to use the revenue?**
Where possible, earmarked taxes directed toward social or public goods receive greater support and acceptability from the general population.4 An SSB tax can be used to finance other interventions to reduce obesity and other NCDs.
4. **Multi-sectorial engagement of stakeholders:** As mentioned in Ireland’s Action Plan 2016-2025, the first step to prevent overweight and obesity should be to “embed multi-sectorial actions on obesity prevention with the support of government departments and public sector agencies.”22 Public bodies, NGOs and other stakeholders should be consulted to help identify different views and perspectives.4,20

5. **Develop strong support:** To ensure the successful implementation of a tax on SSBs, public concerns need to be addressed.4 The tax may be perceived as unfair, or an excessive intrusion into individuals’ lives. Figure 4 provides some of the arguments that may arise regarding SSB taxes.

CSOs and public health experts are valuable allies for supporting a tax and increasing public support.4 Two central roles of civil society have been identified:23

- **Advocate for a tax:** CSOs can advocate for a tax, can present evidence to support SSB taxes, and as a rebuttal to industry claims. They can also offer an incentive to manufacturers by highlighting the gains in sales they could see following a tax and reduction in sugar content.
- **Build public awareness:** CSOs can help raise awareness about the need and benefit of SSB taxes, and can create a groundswell of public support through their work in communities. CSOs can also highlight industry tactics used to oppose SSB taxes, and offer an alternative perspective

6. **Evaluation:** Once enacted, taxes should be monitored, evaluated, adjusted and adapted over time to ensure the effects generated do not dissipate and that they remain fit for purpose.24 As shown through the implementation of the public health product tax in Hungary, a series of amendments have been made to ensure loopholes are closed and the tax can be as effective as possible.25
**Arguments against SSB taxes**

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<thead>
<tr>
<th>Category</th>
<th>Arguments</th>
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<tbody>
<tr>
<td>INDIVIDUAL</td>
<td>1. Individuals are responsible for their own actions and governments should not intervene or regulate what people eat or drink.(^{10}) Negative externalities associated with alcohol and tobacco justified their taxation, but SSBs only impact consumers.(^{10})</td>
</tr>
<tr>
<td>FINANCIAL</td>
<td>2. The tax is <strong>regressive</strong>.(^{4}) It takes a larger percentage of income from low-income earners than from high-income earners, and therefore they would be most affected by the price increase.</td>
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<td></td>
<td>3. The tax will result in <strong>job losses</strong> at local SSB companies and production may move abroad. It will hurt small businesses who will lose customers.(^{4})</td>
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<td>SCIENTIFIC EVIDENCE</td>
<td>1. The link between the consumption of SSBs and obesity remains <strong>controversial</strong>.(^{18})</td>
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<td>ADDITIONAL ARGUMENTS</td>
<td>1. The tax is <strong>discriminatory</strong> as it only applies to certain products and not others.(^{4})</td>
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<td></td>
<td>2. There is <strong>no mandate or jurisdiction</strong> to introduce a tax.(^{4})</td>
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<td></td>
<td>3. It restricts or impinges on rights to trade/commerce or rights of consumer.(^{4})</td>
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<td>4. The industry is part of the solution, not the problem, so taxes are not the right response.(^{10})</td>
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**Arguments for SSB taxes**

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<tr>
<td>HEALTH BENEFITS</td>
<td>1. While an SSB tax will not solve the issue, it has the potential to reduce caloric intake by 1-2% every year.(^{26})</td>
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<td>2. While people consider the financial impact of SSB taxes, they fail to consider the potential health benefits.(^{4}) Studies have shown that lower socioeconomic households substantially reduce their consumption and therefore have greater health benefits from such taxes.(^{27})</td>
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<td>3. Many people are unaware of the health impacts of SSB consumption and therefore make decisions with “imperfect information.”(^{126})</td>
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<tr>
<td>FINANCIAL</td>
<td>1. As with alcohol, federal or local governments have the authority to tax drinks on their sugar content.</td>
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<td></td>
<td>2. To gain greater public support, use the funds collected from the tax for specific health programmes.(^{28})</td>
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<td></td>
<td>3. Studies in California and Illinois show an SSB tax can increase employment through the creation of new opportunities in non-SSB production.(^{29})</td>
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<td>ACCOUNTABILITY</td>
<td>1. Industry promotional marketing disproportionately impacts children who are especially vulnerable to marketing techniques. The adoption of an SSB tax would hold the industry accountable for the consumption and purchasing habits of their products.</td>
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Globally a number of countries have implemented SSB taxes over the past couple of years. Below are three case studies whereby countries in Europe have successful implemented SSB taxes.

### Case study: France

**Rationale**
By 2006, 50% of the French population was overweight or obese. The costs of obesity in France were estimated at between €2.1 and €6.2 billion. As a response, former Prime Minister, François Fillon, announced the enactment of an SSB tax.  

**Date of implementation, type of tax and amount**
In effect since January 1, 2012, the excise tax of €7.16 per hectolitre was raised to €7.45 per hectolitre in 2015. Since July 1, 2018, the amount of the tax is based on the amount of added sugar in a drink, pushing manufacturers to reduce sugar quantities in SSBs.

**Products concerned**
Sugar drinks with added sugar (irrespective of the quantity) and drinks with added sweeteners. Exempted drinks include infant and growth milks, enteral nutrition products and soya-based drinks with at least 2.9% of proteins issued from soya grains.

**Impact of the tax**
Six months after the implementation the tax had been fully passed through to consumers. Surveys showed that people were more likely to perceive the tax positively if the revenue generated was used to improve healthcare systems or if subsidies for other foods accompanied price increases. Sources indicate that during the first year of implementation, sales decreased by 4%.
**Case Study: UK**

**Rationale**
The UK has one of the highest childhood obesity rates in Europe, with nearly 30% of 2-15 years old classified as overweight or obese.\(^{32}\)

**Date of implementation, type of tax and amount**
In effect since April 6, 2018, the UK is the first country to implement a three-tiered levy. Introduced by the Revenue & Customs department, it aims to reformulate existing drinks to reduce amounts of sugar, reduce portion sizes and promote low-sugar alternatives. The tax was set at 18p per litre on drinks that have a total sugar content between 5g and 8g per 100ml, and 24p per litre on drinks with more than 8g of sugar per 100ml.\(^{33}\)

**Products concerned**
Targeted drinks are those which have sugar added to them during the production, contain at least 5g of sugar per 100ml, are ready to drink, or need to be diluted with water or drinks that have a content of 1.2% of alcohol by volume or less. The amount of the levy depends on the sugar content of drinks.

**Impact of the tax**
One of the aims of the Soft Drinks Industry Levy is to push manufacturers to reformulate their products.\(^{13}\) In anticipation to the implementation of the tax, many companies reformulated their drinks to fall below the 5g per 100ml taxable threshold. The announcement of the levy led over 50% of producers to reformulate their drinks before the implementation of the tax.\(^{13,34}\) Additionally, the revenues raised through this levy are to be directed towards increasing the amount of funding dedicated to physical activity in all primary schools.\(^{35}\) The effect on dietary patterns has not yet been fully evaluated.
Case study: Hungary

Rationale
Over two-thirds of Hungarians are either overweight or obese. The consumption of SSBs is high among adults - with 60% reporting daily consumption - as well as among children with obesity.

Date of implementation, type of tax and amount
In 2011, the country introduced the public health product tax (PHPT), aiming to “reduce the consumption of food products that are not useful from a public health point of view and to promote a healthy diet… to make healthy food choices accessible and to improve public funding for health care services, especially public health programmes.” The tax was developed as a sales tax that applies to consumers when purchasing products, as well as to sellers when they first sell a taxable product.

Products concerned
Pre-packaged sweetened products, soft drinks and flavoured beer with added sugar, fruit jams and other sweetened preserves, “alcopops”, alcoholic beverages, energy drinks and snacks high in salt.

Impact of the tax
To evaluate the effect of the tax, two impact assessments were conducted: one in 2012 and one in 2014. To ensure a successful impact, the tax was refined on different occasions in order to respond to manufacturers making inefficient modifications to their products. This allowed the government to ensure that producers who only marginally modified their products took appropriate actions.

About 40% of manufacturers modified their products, either “to reduce or eliminate unhealthy ingredients.” Sales of taxable products fell by approximately 27%, while prices rose by about 29%. In 2014, the consumption of SSBs affected by the PHPT decreased by 12% among people with higher education, 20% for people with secondary education, and 25% for people with primary education. That same year, the consumption of SSBs decreased by 8% for underweight or normal weight people and by 11% for overweight and obese people.

CONCLUSION
The aim of the policy briefing was to provide guidance to policymakers, NGOs and other essential stakeholders to ensure the successful implementation of SSB taxes. It is complementary to the information available through World Obesity’s policy dossier and summarises information extracted from various sources of evidence, including systematic reviews, cost studies, case studies, as well as previous reports on the subject.
REFERENCES


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