WHO has also recommended the implementation of fiscal policies to promote healthy diets as part of a policy package to achieve nine global targets for noncommunicable diseases (NCDs) by 2025, now extended to 2030.

Policy issue and context

Childhood malnutrition remains one of the most prominent global public health problems. In 2020, 38.9 million children aged under 5 years were estimated to be affected by overweight, 45 million by wasting and 149 million by stunting (1), and in 2016 more than 340 million children and adolescents aged between 5 and 19 years were affected by overweight or obesity (2). A major driver of the increases in obesity that have been seen in almost all countries – which in turn contribute to the increasing global burden of disease associated with obesity (3) – is current food environments, with increasing availability, accessibility, affordability and marketing of foods that are high in saturated fats, trans-fats, sugars or salt and are usually highly processed (4).

Countries across the world have committed to taking action to eliminate malnutrition in all its forms (5-7), including through the creation of food environments that facilitate healthy dietary decisions (5). Affordability of foods (which is a function of price and disposable income) is a key aspect of food environments that influence dietary decisions (8), with changes in price influencing consumer demand for many foods and beverages (9). Hence, use of fiscal policies that influence the relative price of foods and beverages – including both taxes on foods and beverages that are high in fat, sugars or salt, and subsidies on foods that contribute to a healthy diet – has been repeatedly
recommended as a policy option to promote healthy diets. For example, the Framework for Action adopted at the Second International Conference on Nutrition in 2014 recommended exploring the use of “economic incentives or disincentives” to promote healthy diets (10), and the World Health Organization (WHO) has recommended the implementation of taxation on sugar-sweetened beverages as a cost-effective intervention to reduce consumption of sugars (11). WHO has also recommended the implementation of fiscal policies to promote healthy diets as part of a policy package to achieve nine global targets for noncommunicable diseases (NCDs) by 2025, now extended to 2030 (6, 12). Based on a literature review in 2019, WHO again recommended that countries consider taxing all sugar-sweetened beverages (13); the Commission on Ending Childhood Obesity also recommended the implementation of sugar-sweetened beverage taxes as part of a policy package to tackle childhood obesity (14). Although the issue of sustainability is beyond the scope of this policy brief, there is growing interest in the possibility of using taxes and subsidies to promote diets that are both healthy and sustainable, and minimize the negative impacts of diets on the environment (15-19).

Malnutrition has many complex and often interrelated causes; thus, fiscal policies to promote healthy diets should be embedded in a comprehensive approach to improve population diet through food system transformation and the creation of healthy food environments. When fiscal policies are part of such an approach, they can be used to shift consumption patterns, encourage product reformulation, and raise domestic revenue (which in turn can be used for health promotion, strengthening health systems or efforts towards universal health coverage).

This policy brief provides policy-makers, programme managers, health professionals and advocates with information on the evidence on the impact of fiscal policies to promote healthy diets with a focus on taxation; challenges and opportunities; and policy options related to the design of taxes to promote healthy diets.

Box 1. Definitions used in this brief (20)

**Fiscal policies to promote healthy diets**: taxes and subsidies (government spending) to promote healthier decisions by consumers

**Taxes** here refer to indirect /consumption taxes, which are taxes imposed on goods or services that cause consumers to pay higher prices and may serve as price disincentives to *consumers*. There are various types of indirect taxes. **Excise taxes** (2) are consumption taxes targeting specific products to increase their price relative to other consumer goods. They can take the form of **ad valorem excise taxes** which are levied as a percentage of the value of a product, or as **specific excise taxes** which are levied as a monetary value according to a certain physical characteristic of the product (e.g. its volume or nutrient content) (21). These types of excise tax can be applied at a uniform or a differential (tiered) rate, and on their own or in combination (i.e. a mixed system).

**Subsidies** here refer to those that result in price incentives to *consumers* (including through rebates, discounts or monetary vouchers or coupons), but do not include cash transfer or in-kind transfer programmes, agricultural subsidies or trade policy instruments.

**Sugar-sweetened beverages** refers to a broad set of non-alcoholic beverages, defined as all types of beverages containing free sugars, including carbonated or non-carbonated soft drinks; fruit or vegetable juices and drinks; liquid and powder concentrates; flavoured water; energy and sports drinks; vitamin waters; ready-to-drink teas; ready-to-drink coffee; flavoured milks and milk-based drinks; and sweetened plant-based milk substitutes.

---

1 The Seventy-second World Health Assembly extended the period of the global action plan to 2030 to ensure its alignment with the 2030 Agenda for Sustainable Development.

2 Excise taxes are the primary policy tool used to correct for market-failures, including negative externalities, negative internalities, and information asymmetries. Negative externalities are costs that are not borne by the consumer or producer of the product but by others in society, or society at large. For example, the costs to third parties of second-hand smoke are not reflected in market prices—that is, smokers do not pay a market price that reflects the negative impact on others. Negative internalities arise when individuals do not fully consider or account for the cost on their futures of their current behavior. In other words, internalities arise when consumption of a given product results in long-term net losses which individuals neglect in favor for short-term benefits. Information asymmetries refer here to the fact that some consumers may not be fully aware of the negative consequences of the use of harmful products.
Progress in implementing fiscal policies to promote healthy diets

Although countries are increasingly heeding recommendations to implement fiscal policies to promote healthy diets, some have yet to do so. In 2016, the first Global Nutrition Policy Review found that 39 WHO Member States reported having implemented fiscal policies, including for example increasing taxes on foods and beverages that contribute to an unhealthy diet, increasing subsidies on foods and beverages that contribute to a healthy diet (22). Among WHO regions, implementation was highest in the Western Pacific Region (48% of responding countries), followed by the Americas (35%), Europe (28%), South-East Asia (27%) and the Eastern Mediterranean (24%) (22). Only 9% of countries in the WHO African Region reported implementation of fiscal policies to promote healthy diets (22).

In recent years, there has been a surge in momentum for the implementation of taxes on sugar-sweetened beverage, including those with a stated objective to reduce consumption of beverages such as sugar-sweetened carbonated soft drinks (23-25). Between 2017 and 2019, the proportion of countries implementing taxes on sugar-sweetened beverage rose from 23% to 38% (26). In 2019, the WHO Region of the Americas led globally, with 60% of countries having implemented such taxes (26). As of May 2022, 85 of the 194 Member States (44%) taxed sugar-sweetened beverages at the national level, while three Member States had subnational or municipality level taxes (Fig. 1) (26, 27). Taxes on foods high in salt, sugars and fat are less widely implemented, but have also seen increased adoption, from seven Member States in 2017 to 12 (6%) in 2019 (26). As of 2022, 29 Member States implemented national level taxes on food products (Fig. 1).

As with taxes on foods high in salt, sugars and fat, subsidies on foods that contribute to a healthy diet are less widely implemented. For example, among WHO regions in 2019, South-East Asia led, with 18% of countries reporting subsidies, followed by the Eastern Mediterranean with 10%, the Western Pacific with 7%, and Africa, the Americas and Europe with just 6% (26).

Of 39 countries that reported detailed information on the type of fiscal policy they had implemented in the second Global Nutrition Policy Review, 54% increased taxes on foods and beverages that contribute to unhealthy diets and 23% increased subsidies on foods and beverages that contribute to healthy diets. Only 15% reduced taxes on healthier food and beverage options and just 10% reduced subsidies on less healthy foods and beverages (22).

Figure 1. Member States by region with national, subregional or municipality level taxes on sugar-sweetened beverages and on foods

---

The surveys (Global Nutrition Policy Review and the NCD country capacity survey) do not ask respondents to differentiate between taxes to generate fiscal revenue and taxes to pursue a public health objective. Hence, it is not known how many of the reported taxes on sugar-sweetened beverages are designed to pursue a public health objective.
Some countries have levied taxes on less healthy foods and beverages (e.g. carbonated beverages and chocolate) since as early as the 1920s and 1930s, primarily to generate revenue rather than for health purposes (22). More recently, countries are increasingly seeing such taxes as a strategy for achieving healthier diets, perhaps driven by the inclusion of this approach in the WHO Global action plan for the prevention and control of noncommunicable diseases 2013–2020 (6).

Evidence on the impact of fiscal policies to promote healthy diets

Taxes

Modelling studies suggest that taxes on less healthy foods and beverages would bring about positive dietary changes, and there is growing evidence from “real world” country experience of the benefits of implementing such taxes (9, 20, 24, 28–35).

Much of the evidence available is on the impact of taxes on sugar-sweetened beverages, with countries seeing positive outcomes such as reductions in purchases and consumption of taxed beverages (13, 36–44); increases in purchases and consumption of untaxed beverages, including bottled water (13, 37, 39, 40, 44); product reformulation to reduce sugar levels (13, 43); increased public awareness of dietary advice to limit the consumption of sugar-sweetened beverages (43); and generation of revenue that can be used for health purposes (43, 44).

Box 2. South Africa’s health promotion levy

In 2018, South Africa introduced a specific excise tax on sugar-sweetened beverages, known as the Health Promotion Levy, to tackle rapidly rising intakes of such beverages and a growing burden of diet-related NCDs (45). The tax is based on the sugar content of beverages. Specifically, a fixed ZAR 0.021 (around US$0.0015) tax rate for every gram of sugar above a 4 g/100 ml threshold (the first 4 grams per 100ml are tax free). In 2021, the Health Promotion Levy represented about 11% of the price per litre. An evaluation based on household purchase data collected between 2014 and 2019 found that the average volume of taxable beverages purchased, as well as the calories and sugar purchased from taxable beverages, fell after the tax was announced (but before it was implemented) and then again in the year after implementation. Over the same period, there was a small increase in purchases of beverages that were not subject to the tax. The reductions were greatest in lower socioeconomic households. Compared with the trend in sales predicted before the tax was announced, the volume of taxable beverages purchased was reduced by 28.9% (31.6% in low socioeconomic households), and the calories and sugar purchased from those beverages were reduced by 52% and 51% (45). A key lesson learned from the South African experience is that the design of a tax influences producer and consumer responses; the tiered tax based on sugar content of beverages both reduced purchases of taxed sugar-sweetened beverages (SSBs) among consumers, and induced producers to reduce the sugar content in beverages.

4 The Seventy-second World Health Assembly extended the period of the global action plan to 2030 to ensure its alignment with the 2030 Agenda for Sustainable Development.
There is limited evidence (much less than in relation to taxes on sugar-sweetened beverage) from research or country experience in relation to taxation of foods that contribute to unhealthy diets (e.g., foods high in saturated fats, trans-fatty acids, free sugars or salt). However, the evidence that is available suggests that such taxes can reduce purchases (46-49) and consumption (50) of taxed foods, encourage product reformulation (47), generate revenue that can be used for health purposes (47) and increase awareness of healthy eating (47).

**Box 3. Hungary’s Public Health Product Tax**

In Hungary, the Public Health Product Tax, which came into effect in September 2011, is intended to reduce consumption of unhealthy foods, promote a healthy diet, increase the accessibility of healthy foods choices and raise revenue for health care services. The specific excise tax is applicable to ready-to-eat food and beverages with high salt, sugar or caffeine content, with rates varying depending on the product category. An impact assessment estimated that purchasing of processed foods decreased by 3.4% following the introduction of the tax, while purchasing of unprocessed foods was estimated to have increased by 1.1%, with the lowest-income groups most responsive to the tax (46). Another assessment found that 16% of surveyed consumers of salty snacks changed their consumption of salty snacks, and 14% of surveyed consumers of pre-packaged sweets changed their consumption of pre-packaged sweets (51). In terms of reason for changing consumption, higher prices were cited by 56% of salty snack consumers and 66% of pre-packaged sweets consumers. Consumers who decreased their consumption were two to three times more aware that the product was unhealthy (51).

An important lesson from the experience in Hungary is their use of a nutrient profile model to differentiate tax rates and making sure that there are healthy substitutes.

**Box 4. Mexico’s tax on nonessential energy-dense foods**

In October 2013, the Mexican Government passed legislation to introduce a specific excise tax of one peso (about US$ 0.05) per litre on sugar-sweetened beverages, equivalent to a 10% price increase on taxed beverages. The success of the tax in reducing purchases and consumption of sugar-sweetened beverages has been widely reported (40, 52). Less well known is an 8% ad valorem excise tax on nonessential foods with an energy density of more than 275 kcal per 100 g that became effective in January 2014, designed to help slow the country’s rising obesity rates and generate tax revenues (53). Evaluations conducted annually for the first three years of implementation found decreases in the volume of taxed food purchased – particularly in lower socioeconomic households – compared with expected levels based on pre-tax trends (54-56). No changes in purchases of untaxed foods were observed in the post-tax period. In the first year after introduction of the tax, purchases of taxed foods did not change for households with high socioeconomic status, but they decreased by 5.8% in those with medium socioeconomic status and by 10.2% in those with low socioeconomic status (54).

**Box 5: Tonga and Fiji’s tax exemptions for healthy foods**

In July 2016, the Government of Tonga abolished a 15% VAT on products including fruits and vegetables, eggs, water and yoghurt (57). Similarly, in 2013, the Government of Fiji removed a 10% excise duty on imported vegetables, and the volume of imported vegetables that are not grown in Fiji increased substantially between 2010 and 2014 (58). While these examples show that governments can use fiscal policies as tool to increase the availability of fruit and vegetables in a country, it is important to monitor whether such increases benefit all population groups (58). Monitoring of the prices of foods subject to tax exemptions provides insights to whether the goal of price reductions and increased consumption of healthier options was achieved (57).
Subsidies

Modelling and intervention studies suggest that subsidies (including food vouchers, price discounts or public distribution systems) to reduce prices of fruit and vegetables are likely to be effective in increasing consumption of these foods and improving overall diet quality, although the effect on energy intake and weight is unclear (41, 59-61). Evidence from policy evaluations is limited. A recent systematic review of evidence found that fruit and vegetable subsidies targeting low-income populations increase their purchase of fruit and vegetables (35). There is growing evidence that combining taxes on foods that contribute to unhealthy diets with subsidies of foods that contribute to healthy diets is likely to be the most effective approach (31, 62). The impact of agricultural subsidies, including both the removal of subsidies on products that are inconsistent with a healthy diet and applying subsidies to products consistent with a healthy diet are beyond the scope of this brief.

Impact on health equity

A commonly used argument regarding taxes on unhealthy foods and beverages is that these are financially regressive (i.e. people of lower socioeconomic status spend a bigger proportion of their income on these goods compared to the people of higher socioeconomic status) (63). However, because of the likely stronger response of lower socioeconomic groups to price changes, in other words, lower socioeconomic groups decrease consumption of taxed products by a greater extent (64), the health benefits of taxes on less healthy foods and beverages, as well as the reduction in health care expenditures associated with diet-related diseases, are likely to be progressive. Evaluations of taxes implemented in Mexico and South Africa, for example, indicate greater reductions in purchasing of taxed foods and beverages among lower socioeconomic groups (45, 54). Similarly, modelling studies have found greater health benefits for lower socioeconomic groups (32, 45, 54, 65, 66). Hence, carefully designed taxes could reduce health inequities, particularly if the tax revenue is used progressively (i.e. where lower socioeconomic groups receive a greater benefit) (67) and if taxes are implemented in combination with subsidies (64). Often, subsidies are targeted to lower socioeconomic groups and thus have the potential to reduce health inequities.

In general, the evidence on the impact of fiscal policies to promote healthy diets collected in low- or middle-income countries is sparse, but some studies suggest that the use of taxes and subsidies is also appropriate in such settings (33, 38, 67, 68).

Elements to consider when designing fiscal policies to promote healthy diets

The health impact of a fiscal policy is influenced by its impact on prices and by how consumers respond to price changes in the targeted foods and beverages. Designing a tax or subsidy involves consideration of several policy design elements, including products subject to the tax or subsidy, the type of tax, as well as the tax base and rate. Importantly, a tax can only be levied if authorized by a law and the mentioned policy design elements are determined by a law. Consideration must be given to the country's existing national legal framework for taxation. In addition, member countries of the World Trade Organization (WTO) must ensure that the proposed policy design elements do not discriminate, for example between imported and locally-produced products, as WTO law also disciplines tariff and non-tariff measures.

Products subject to the tax or subsidy

One key policy design element is the coverage of foods and beverages that are taxed or subsidized. The foods and beverages (or nutrients) included within a tax or subsidy base should be those that are associated with poorer health outcomes (in the case of taxes) or better health outcomes (in the case of subsidies), based on epidemiological evidence and the likelihood that consumption will be affected by a tax or subsidy (69). In the case of taxes, given that consumers may respond to a tax by substituting taxed products with untaxed foods and beverages, the products subject to the tax should be chosen to ensure that substitutes are not less healthy foods and beverages (59). Additionally, as the experience from Hungary shows, it is important to complement these efforts with policy options to ensure that healthy substitutes are available.

Determining the set of taxable products on the basis of nutrient profiles (i.e. the nutritional composition of foods and beverages) may be less likely to have unintended consequences than those based on an individual nutrient, because they are less likely to also apply to healthier foods and beverages (28). Nutrient profile models can be a useful tool for determining the products to be taxed (59), but how the taxable products are defined may influence the feasibility of implementing taxes. For example, taxes on simply defined foods (e.g. sugar-sweetened beverages) may be more straightforward to implement than taxes targeting multiple nutrients, especially in countries with low resources (69). However, the Harmonized Commodity Description and Coding System (HARMCO) for...
classifying commodity groups, which is used in most national tax systems, does not include categories based on healthfulness of products, for example grouping beverages with and without sugars in the same category. Taxes targeting an individual nutrient may also be administratively burdensome to implement, given that they would apply to a wide range of foods (28).

Currently there is large variation in the products subject to SSB taxes of policies already implemented in WHO Member States. Fig. 2 shows the variation in the products subject to sugar-sweetened beverage taxes. As of 2022, 83 WHO Member States tax “soft drinks”, although seven only tax those that are carbonated. Juices and juice drinks can be significant dietary sources of sugars, but less than half (37) of the countries include these within the taxed products; also, countries often exempt fresh fruit and vegetable juices, pure juices (100%) or juice drinks with a specific minimum level of pulp. Energy drinks and sports drinks are increasingly being included in national excise taxes, often at a higher rate than other sugar-sweetened beverages. As such, there is ample space within already implemented policies taxing SSBs to better define the list of taxable products to align more closely with public health objectives.

Figure 2. Products taxed in national level sugar-sweetened beverage taxes in 85 WHO Member States

Foods that have been taxed in countries include those that are typically high in sugars, unhealthy fats and salt, such as confectionery, ice creams, meat preparations, or specific food commodities such as unhealthy meat cuts, instant noodles or bouillon cubes. See box 6 for examples of what foods have been taxed in different countries for health purposes.

---

* Two countries are not taxing soft drinks. One has a tax at national level covering yoghurt drinks, and the other covering energy drinks.
Box 6. Examples of what foods have been taxed in countries

**Mexico:** Nonessential foods with an energy density of more than 275 kcal per 100 g have been subject to an 8% ad valorem excise tax since 2014. Taxed food items include crisps and snacks, candies and sweets, chocolate, puddings, peanut and hazelnut butters, ice cream and ice pops, and cereal-based products with substantial added sugar (54).

**Ethiopia:** In February 2020, Ethiopia introduced an ad valorem excise tax on imported and locally produced foods, including fats and oils with high levels of saturated or trans-fatty acids, sugar and sugar confectionery, chocolate and food preparations with cocoa and soft drink powders (70).

**Hungary:** The Public Health Product Tax is a specific excise tax applied to a variety of products including snacks with more than 1 g salt per 100 g, condiments with more than 5 g salt per 100 g, flavourings with more than 15 g salt per 100 g, energy drinks, soft drinks (sugar-sweetened and artificially sweetened) and pre-packaged sugar-sweetened products (47).

**Tonga:** Since 2016, Tonga has imposed an excise tax and/or import duty on high fat foods – including very fatty meat products such as turkey tails and mutton flaps – as well as foods and beverages high in sugars and instant noodles (57).

**Denmark:** In 2011, Denmark introduced a specific excise tax on saturated fat in foods, but the tax was abolished after just over a year for economic reasons after misleading negative media coverage (72). Research has since shown that the tax reduced fat consumption by between 10% and 15% (50). Denmark still taxes chocolates, confectionaries, biscuits and cakes via specific excise taxes.

**Type of tax**

Beyond establishing what products are subject to the tax, another key policy design element of taxes to promote healthy diets is determining the tax type. From a public health perspective, excise taxes are generally preferable to sales taxes and VAT because they are applied to a specific product or products, decreasing their affordability relative to other products; in contrast, VAT or sales taxes typically apply to a broad range of goods and services, and do not affect the relative price of the product. Also, compared with sales taxes (another type of indirect tax), the increased price due to an excise tax is more likely to be visible to consumers in the shelf price, which may increase the likelihood of behavioural change (69). Among the different types of excise taxes, specific excise taxes are likely to be more effective than ad valorem excise taxes, because they increase the price of all taxed foods and beverages by the same (absolute) amount, reducing the incentive for consumers to substitute a cheaper taxed product (59, 69, 72). Specific excise taxes may also be easier to implement than other tax types and are not susceptible to price manipulation by industry; however, as noted above, they should be regularly adjusted in line with inflation and income growth to ensure they remain effective (59). Specific excise taxes based on nutrient content (e.g. sugar-sweetened beverage taxes based on sugar content) are likely to have a larger impact, because they encourage consumers to substitute to healthier untaxed substitutes and encourage industry to reformulate, but simpler taxes (e.g. volume-based sugar-sweetened beverage taxes) may be more feasible in countries with weaker tax administration (59).
**Tax structure**

A third tax design element to consider is the tax structure. Tax structures can be either uniform (same type of tax and tax rate applies to all taxable products), or tiered (with the tax rate varying according to product characteristics). Taxes that are tiered rather than uniform may encourage consumers to substitute to foods and beverages containing lower levels of the targeted nutrient, and encourage industry to reformulate foods and beverages (73).

Among the 85 Member States that taxed sugar-sweetened beverages as of 2022, 17 had specific excise taxes based on sugar content or a tiered tax system, where beverages with higher contents of sugars were taxed at higher rates than those with lower contents. Another three countries only taxed beverages with a sugar content above a specific threshold. This may encourage product reformulation by beverage companies wanting their products to be more affordable to consumers, as in the case of the United Kingdom’s Soft Drink Industry Levy (see Box 7).

**Box 7. The United Kingdom’s Soft Drinks Industry Levy**

In the United Kingdom of Great Britain and Northern Ireland (United Kingdom), a two-tiered specific excise tax on soft drinks (the Soft Drinks Industry Levy) was announced in March 2016 and implemented in April 2016. Beverages with 8 g or more of sugar per 100 ml are taxed at £0.24/L (US$ 0.33/L) whereas beverages with 5–8 g of sugar per 100 ml are taxed at £0.18/L (US$ 0.25/L). Beverages with less than 5 g sugar per 100 ml are not taxed. One year after the levy was introduced, the amount of sugar purchased from soft drinks was 10% lower (equivalent to 30 g per household per week) than expected from trends before the levy was announced (74). There is evidence that the levy incentivized manufacturers to reformulate their products to reduce sugar levels, with the proportion of sugar-sweetened beverages over the lower levy sugar threshold falling by 34 percentage points between 2015 and 2019 (75). Reformulation was one of the policy objectives, announced prior to policy implementation.

**Tax or subsidy rate**

The rate of taxes or subsidies to promote healthy diets is another key policy design element. To have a meaningful public health impact, tax and subsidy rates must be sufficiently high to influence purchasing and consumption of the taxed and subsidized foods and beverages (59). The tax rate of specific excise taxes should be regularly adjusted in line with inflation and income growth, to ensure they remain effective (59).

**Box 8. Bahrain's tax on energy drinks and soft drinks**

Since December 2017, Bahrain has levied an ad valorem excise tax on energy drinks and soft drinks (76). The tax is levied at a rate of 100% on energy drinks and 50% on carbonated soft drinks (any aerated beverage except unflavoured aerated water). Evidence indicates that this tax led to a decrease in the annual growth rate of soft drink sales volumes. Similarly, high tax rates have been introduced in many neighbouring countries (e.g. Oman, Qatar, Saudi Arabia and United Arab Emirates) (77).

**Box 9. Saudi Arabia’s tax on carbonated drinks**

In 2017, Saudi Arabia introduced an 50% ad valorem excise tax on carbonated drinks. Evidence indicates that this tax led to an effective price increase of taxed products and to a decrease of 35 % in carbonated drink volume sales relative to other Arab Gulf states (78).
**Tax compliance**

Essential for taxes on foods and beverages that contribute to unhealthy diets are an effective enforcement mechanism and the ability to impose sanctions for non-compliance (whether through an existing law or the new fiscal policy). Existing enforcement structures (e.g. those for taxes on tobacco and alcohol) may be used to reduce implementation and enforcement costs.

**Monitoring and evaluation**

Monitoring and evaluation are key to understanding the effectiveness of fiscal policies to promote healthy diets, and there should be planning and budgeting for monitoring and evaluation from the outset. The responsible monitoring body should be defined and, if feasible, a baseline evaluation should be conducted before implementing the policy, to allow for before-and-after evaluation. Evaluations should be made public to ensure transparency and to contribute to the international body of knowledge and evidence on fiscal policies to promote healthy diets (13). Also, key are monitoring and evaluation of the health equity impacts of fiscal policies to promote healthy diets, and of any potential unintended consequences. A recent review of global experience summarized key elements to consider for evaluation of a sugar-sweetened beverage tax, including the advantages and challenges of different methodologies, in particular the use of natural experiments, the use of relevant outcomes that are likely to be of interest to different actors (such as government, consumers and industry), and the strengths and limitations of data sources to be used (79).

### Box 10. Possible indicators to monitor a policy’s effect

It is often not possible to directly attribute changes in public health to a specific policy (e.g. a tax or subsidy) owing to the complex mix of causes of malnutrition. In addition, complementary measures are often implemented at the same time, making it even more difficult to assess the impact of a particular fiscal policy on health outcomes; also, there is a substantial time lag with regard to health outcomes. Hence, it is important to monitor both relevant health outcomes and intermediate indicators of the policy’s effect (e.g. changes in prices, purchases, consumption, dietary intake, food and beverage composition and revenue) (59).

### Use of tax revenue

Where a country’s legal system allows for it, earmarking revenue from taxes on less healthy foods or beverages for health-related expenditure can increase funding for progress towards public health goals and can help to establish positive perception of such taxes among the public (59, 72, 80-82). The potential to raise revenue from such taxes could be an important consideration, given the financial problems many countries face as a result of the COVID-19 pandemic (83). In the policy process, earmarking can face strong resistance from finance authorities as it is said to introduce budget rigidity (limiting the ability to shift resources to align to spending needs and realities) and increase fragmentation. However, it is important to consider that there are varying levels of earmarking, within the spectrum of “soft” to “hard” earmarking, which are associated with different levels of fiscal risk. Soft earmarking, whereby revenues are designated for a particular service but do not determine the amount spent, is usually preferred over hard earmarking, as it comes closer to standard budget processes and provides more flexibility.
Box 11. Examples of use of tax revenue for health purposes

**Hungary**: Revenue from the Public Health Product Tax is allocated to public health, helping to offset the health care costs of diet-related NCDs (47).

**Malaysia**: Revenue from the specific excise tax on sugar-sweetened beverages contributes to providing free and healthy breakfasts for primary school children (84).

**Portugal**: In its first year of implementation, a specific excise tax on sugar-sweetened beverages generated about 80 million Euros, all of which contributed to funding of the Portuguese National Health Service (85).

**Dominica**: Revenue from an ad valorem excise tax on sugar-sweetened beverages contributes to the national Get Healthy campaign (43).

Challenges and opportunities for fiscal policies to promote healthy diets

Country experience shows that it is important to carefully plan fiscal policies to promote healthy diets prior to their implementation. Possible windows of opportunity to introduce fiscal policies for healthy diets include a change in political leadership, implementation of tax reform, the development of a new national health or nutrition strategy, and increased political debate or growing social awareness around obesity and diet-related NCDs (53, 86). During the COVID-19 pandemic, the increased risk of severe illness or death for people affected by obesity or diabetes has become clear; the interplay between obesity, NCDs and infectious diseases reinforces the need for policy action to promote healthy diets (87).

The implementation of fiscal policies to promote healthy diets – whether through the introduction of a new tax or subsidy, or an increase in the rate of an existing tax – can encounter opposition. Strategies that can help policymakers overcome any opposition encountered include the following:

- Galvanizing political leadership and support, and fostering cooperation across government sectors (81).
- Identifying influential “champions” from the start: Visible high-level, sustained commitment from governments can counterbalance food industry-led opposition to taxes (88), while cooperation between health and finance policy-makers can allow development and successful implementation of appropriate policy solutions (47).
- Stating the objective(s) of the fiscal policy: Having clear, stated objectives is key to ensuring that the policy is well designed to meet the objective, and for promoting transparency and facilitating monitoring and evaluation of the policy’s success. For taxes, it is important to be clear about whether the goal is to raise revenue, improve public health or health equity, or a mix of these. The public health objectives need to be clear and carefully formulated because any uncertainty about objectives leaves the policy vulnerable to opposition (72).
- Clearly defining the products that are subject to the tax or subsidy: Clear definitions help to avoid any confusion about which products are taxed or subsidized. An understanding of substitutes for taxed products, and how savings on subsidized products might be spent, is particularly important. Fiscal policies with a public health objective should be broad and cover potential less healthy substitutes of the taxed products — if many exceptions are made, the measure becomes ineffective.
- Consulting stakeholders: Consultation is an important part of the policy development process, but must be transparent and include robust safeguards against conflicts of interest. If industry is consulted on proposals for a tax, the consultation is best carried out in the form of a public hearing that also involves independent experts and civil society.
Ensuring that communication is transparent and evidence based: Clear communication from the outset can increase public awareness of the positive health impacts of taxes or the removal of existing staple food subsidies (particularly for groups with lower socioeconomic status), and can thus support policy implementation and address potential mistrust by the public.

Earmarking tax revenue for health purposes: Using tax revenue for health purposes can increase public support for taxes (59, 72, 80).

Ensuring that taxes do not discriminate against foreign products: Ensuring a lack of discrimination helps to avoid trade disputes. Excise taxes are therefore preferable to import tariffs, because they tax domestic and imported products equally.

Highlighting evidence on positive economic impacts: Industry arguments about projected negative impacts on profits, employment and economic growth, and the regressivity of taxes, can be addressed with evidence from studies showing that net economic impacts are often positive, macroeconomic impacts are minimal and industry can mostly mitigate the effects of fiscal policies (89-92).

In addition to implementing the strategies outlined above, which can help policy-makers overcome any opposition encountered, policy-makers should be prepared with solid scientific evidence to respond to arguments commonly used by the industry to oppose tax measures on unhealthy products. Similarly as in the case of tobacco taxes, country experiences show that the industry’s arguments against sugar-sweetened beverage tax policies can be roughly organized into the five categories of SCARE tactics: (S) sowing doubt by discrediting science and diverting attention, (C) court and legal challenge threats, (A) anti-poor rhetoric (regressivity), (R) revenue instability and (E) employment impact.
Table 1. Examples of common arguments from opponents and counterarguments (adapted from (23, 44, 63))

<table>
<thead>
<tr>
<th>Common arguments from opponents</th>
<th>What evidence and country experiences actually indicate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(S) sowing doubt by discrediting science and diverting attention</strong></td>
<td></td>
</tr>
<tr>
<td>Taxes on less healthy foods and beverages do not reduce consumption.</td>
<td>Price elasticities, modelling studies and evaluations of implemented taxes on less healthy foods and beverages indicate that well-designed taxes can reduce consumption. Taxes on other unhealthy commodities (e.g. tobacco) have successfully reduced demand for these commodities. A tiered tax encourages reformulation towards healthier options, thereby affecting consumption patterns.</td>
</tr>
<tr>
<td>People should be responsible for their own lifestyles – governments should not impose on what people eat.</td>
<td>The food environment – and food industry actions (e.g. marketing and availability) – also influence what people eat. Governments have responsibilities to protect the right to health, the right to food and ensure healthy environments, as enshrined in the constitution of some countries; fiscal policies to promote healthy diets are one measure that can be adopted in fulfilling these responsibilities.</td>
</tr>
<tr>
<td>The food industry is undertaking other voluntary initiatives to encourage healthy lifestyles (e.g. corporate social responsibility campaigns that promote physical activity and provision of nutrition information on product packaging), regulatory measures are not necessary.</td>
<td>Corporate social responsibility campaigns, including those promoting physical activity, function as public relations strategies for the food industry, which continues to sell more of its products and avoid regulation while demonstrating its “good intentions”. Without public policies to promote healthy diets and address intakes of foods and beverages high in fat, salt and sugars, physical activity programmes alone are unlikely to be successful at addressing overweight and obesity. Industry-proposed nutrition information for inclusion on product packaging is often confusing and insufficiently clear, and populations may lack the capacity to understand, use and interpret such information; nutrition labelling should be regulated to ensure that such information is understandable.</td>
</tr>
<tr>
<td>Overweight and obesity are complex issues that will not be solved by taxes on less healthy foods and beverages.</td>
<td>Overweight and obesity are complex issues, and taxes are one policy option in a comprehensive package of policies that are recommended to address them. The revenue collected from taxes could be invested in other initiatives to address overweight and obesity.</td>
</tr>
<tr>
<td><strong>C) court and legal challenge threats</strong></td>
<td></td>
</tr>
<tr>
<td>Taxes may be challenged on grounds that they breach domestic or international law.</td>
<td>Many countries have effectively defended legal challenges to taxation policies under both domestic and international investment law. Tax policies can be developed in a manner that safeguards the government’s position in the event of legal challenge. Legal threats should not necessarily impede efforts to advance SSB tax policies.</td>
</tr>
<tr>
<td><strong>(A) anti-poor rhetoric ( regressivity)</strong></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Taxes on less healthy foods and beverages are regressive.</td>
<td>In many countries, overweight and obesity and their consequences are regressive, with lower socioeconomic groups disproportionately affected. Taxes on less healthy foods and beverages are therefore likely to be progressive in terms of both their health benefits and associated advertised health expenditures with greater benefits for these lower socioeconomic groups. The revenue collected from taxes can also be invested in initiatives that benefit lower socioeconomic groups (e.g. other health-related activities). In the case of sugar-sweetened beverages, such beverages are not a necessary part of any diet, and healthier substitutes are frequently available at little or no extra cost.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>(R) revenue instability</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes will not yield the expected revenue, or increases to existing taxes may reduce revenue yields.</td>
<td>The impact on revenues of taxes to promote healthy diets depends largely on how the tax is designed and administered. Country experiences indicate that these taxes can generate additional revenue, which can then be used to finance health or social initiatives.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>(E) employment impact</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes on less healthy foods and beverages will increase prices and reduce sales, affecting employment.</td>
<td>Because taxes encourage consumers to substitute taxed foods and beverages for healthier foods and beverages, demand for healthier options may increase, providing opportunities for the food industry to offer such options and for jobs to be derived from the increased demand for these products. Consumers may also spend money they would have spent on taxed foods and beverages on other goods and services, increasing employment opportunities in other industries. Also, the revenue collected from taxes could be invested in creating other employment opportunities (e.g. in improving drinking-water infrastructure).</td>
</tr>
</tbody>
</table>

*Sources: (20, 23, 44, 63).*
Call to action

To incentivize consumption of healthier options and disincentivize the consumption of less healthy options, governments are called upon to implement fiscal policies that promote healthy diets, such as taxes on less healthy foods and beverages and subsidies on foods and beverages that contribute to a healthy diet. Policy design elements (e.g. tax or subsidy bases and rates and tax types) should be carefully considered in the development of fiscal policies to ensure that such policies are effective in promoting healthy diets.

Acknowledgements

This policy brief was prepared by (in alphabetical order) Ms Ruby Brooks, Dr Luz Maria De-Regil, Dr Katrin Engelhardt, Ms Kaia Engesveen, Ms Lina Mahy, Ms Karen McColl, Dr Chizuru Nishida, Ms Camilla Haugstveit Warren, and Dr Rain Yamamoto, Department of Nutrition and Food Safety, World Health Organization (WHO). Valuable inputs and critical review were provided by Ms Itziar Belausteguigoitia, Mr Jeremias Paul Jr, Mr Roberto Iglesias, Ms Laura Rassouw, Ms Anne-Marie Perucic, Fiscal Policies for Health Unit, Department of Health Promotion, as well as by the following experts who contribute to the Science & Technology in Childhood Obesity Policy (STOP) project: Prof Fabrice Etlié, Dr Mojca Gabrijelčič, Prof Tiina Laatikainen, Ms Päivi Mäki, Dr María M. Morales Suárez-Varela, Dr Susanna Raulio, Prof Franco Sassi, Dr Marco Silano, Dr Josep A. Tur and Prof Martin White. The STOP project (http://www.stopchildobesity.eu/) received funding from the European Union’s Horizon 2020 research and innovation programme under Grant Agreement No. 774548. The STOP Consortium is coordinated by Imperial College London and includes 24 organisations across Europe, the United States and New Zealand. The content of this publication reflects only the views of the authors, and the European Commission is not liable for any use that may be made of the information it contains.

WHO gratefully acknowledges the financial support provided by the Government of Japan and the Government of Sweden, for the production of this policy brief.
References


References cont.


References cont.


References cont.


76. NOURISHING and MOVING policy databases London: World Cancer Research Fund International; (Available from: https://policydatabase.wcrf.org/).


Ten of the Region’s countries have policies relating to trans-fatty acids and they are increasingly implementing specific regulatory measures. Thirteen countries had fully or partially implemented national salt reduction policies by 2019.
WHO recommends reducing the intake of free sugars to less than 10% of total energy intake and a further reduction to below 5% for additional health benefits.
Globally, changes are happening in the nutrition-related policy environment with an increasing number of countries taking regulatory action to improve food environment to promote healthy diets and nutrition. These include the implementation of nutrition labelling, fiscal policies, trans-fat bans, reformulation of food products, and restricting marketing of foods and non-alcoholic beverages to children.