

# Situation analysis of sugar-sweetened beverages taxation in Eastern Mediterranean Region

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## Abstract

**Background:** Significant attention is being given to the role of sugar-sweetened beverages (SSBs) in the increasing rates of obesity and diet-related noncommunicable diseases in the Eastern Mediterranean Region (EMR).

**Aim:** To document the different approaches being used by EMR countries in implementing the sugar-sweetened beverages taxation.

**Methods:** This study used data on indirect taxes levied on SSBs by the 22 EMR countries and territories collected by WHO between July 2022 and June 2023. For comparison between countries, all applicable taxes were converted to a percentage of the tax-inclusive retail prices and standardized.

**Results:** Eleven EMR countries imposed the national excise tax on carbonated SSBs and 10 imposed excise tax on at least one type of beverage other than carbonated SSBs. *Ad valorem* excise taxes were the most-used type for carbonated SSBs, with 10 of the 11 countries applying them. Morocco applied volume-based specific excise taxes with different rates depending on the sugar content. Excise tax represented the highest tax proportion (31.7%) in Oman and United Arab Emirates, while total tax represented the highest proportion (42.0%) of the retail price in Saudi Arabia and 36.5% in Oman and United Arab Emirates.

**Conclusion:** Only half of the EMR countries are currently implementing SSBs taxation, and the imposed tax is less than 20% in half of these countries. All EMR countries should start implementing SSBs taxation as part of their national disease control policy frameworks to help reverse the increasing trend of obesity and other diet-related noncommunicable diseases in the region.

Keyword: sugar-sweetened beverage, SSB, sugar tax, excise tax, taxation, obesity, noncommunicable disease, Eastern Mediterranean

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## Introduction

WHO defines sugar-sweetened beverages (SSBs) as beverages that contain free sugars. SSBs include carbonated or noncarbonated soft drinks, fruit and vegetable juices, liquid and powder concentrates, flavoured water, energy and sports drinks, ready-to-drink tea and coffee, and flavoured milk drinks (1). The sugar content usually ranges from 3–4 g/100 ml (mainly among vegetable juices) to 7–9 g/100 ml (energy drinks and flavoured milk drinks) and 13 g/100 ml (fruit juices and carbonated drinks) (2–5).

Consumption of SSBs is a major risk factor associated with obesity and noncommunicable diseases (NCDs) (6). It is positively and directly associated with weight gain (7), all-cause and cardiovascular disease (CVD) mortality (8), type 2 diabetes, coronary heart disease, stroke (9) and cancer (10). Numerous mechanisms, including inflammation, glucose/fructose and lipid metabolic pathways, and immunomodulation, are thought to independently influence how sugar affects the development of CVDs and cancer, even in the absence of obesity (11, 12).

One key intervention to reduce the consumption of SSBs is increased taxation on such products. The primary goal of health (excise) taxes is to improve population health by reducing consumption of unhealthy products (13). Empirical evidence suggests that taxation of SSBs is an effective intervention to reduce consumption (14). However, fiscal policies alone may not be sufficient on their own to address obesity, therefore, combination with other interventions is needed (15, 16). A recent systematic review and meta-analysis suggested that a 10% increase in the price of SSBs would reduce consumption by 15.9% (17). Reduced consumption of SSBs may reduce associated diet-related NCDs. For these reasons, WHO has added SSBs taxation to the recommended policy options to prevent NCDs and address childhood obesity (18). In 2022, WHO issued evidence-based tools for the creation, administration and implementation of SSBs tax policies. These tools included building support, countering opposition, marshalling supportive evidence, mapping the relevant policy context, tax design (purpose of the tax and the products that should be taxed), and monitoring and evaluation (19, 20). As of July 2022, at least 108 countries had applied national excise taxes on

at least one type of SSBs, and 105 countries had applied taxes on carbonated SSBs, which are the most popular type of SSBs (21).

High levels of SSBs consumption have been linked to the following sociodemographic traits: smoking, young age, living in an urban or central region, lower educational attainment, and male gender (22–24). In the Eastern Mediterranean Region (EMR), NCDs were linked to 66% of total deaths compared with 74% globally in 2019 (25). In 2019, ~1.5 million deaths among adults in the EMR were linked to CVDs. Around 190 000 deaths were linked to diabetes and 431 312 individuals died from cancer (25). In 2021 the prevalence of diabetes was higher in the EMR than in other regions (26), and the prevalence of obesity was the third highest globally (27). More than half of the EMR population was overweight and ~25% was obese. The Gulf Region, in addition to Jordan, Libya, Egypt and Lebanon, had the highest obesity rate in the EMR (25). In 2019, in 8 of the EMR countries, obesity was the primary risk factor identified for the number of disability-adjusted life years (28). In 2018, the highest mean consumption of SSBs among EMR countries was recorded in Djibouti (2.5 servings/week, 594.3 g/day) followed by Kuwait (1.6 servings/week, 396.3 g/day). These estimates are significantly higher than the global estimates of 0.4 servings/week and 103.5 g/day (29) (Figure 1).

In 2016, the EMR countries created a policy and action plan for sugar reduction based on WHO standards (30). The EMR included SSBs taxes among fiscal measures in the 2019–2023 framework designed to assist the initiatives for obesity prevention (31). Data regarding the EMR countries that applied the fiscal measures have been discussed (32).

This study summarized: the different types of taxes applied to SSBs (excise, value-added or import taxes); the structure and design of the taxes (*ad valorem*, specific or mixed excise, the bases on which the taxes were applied);

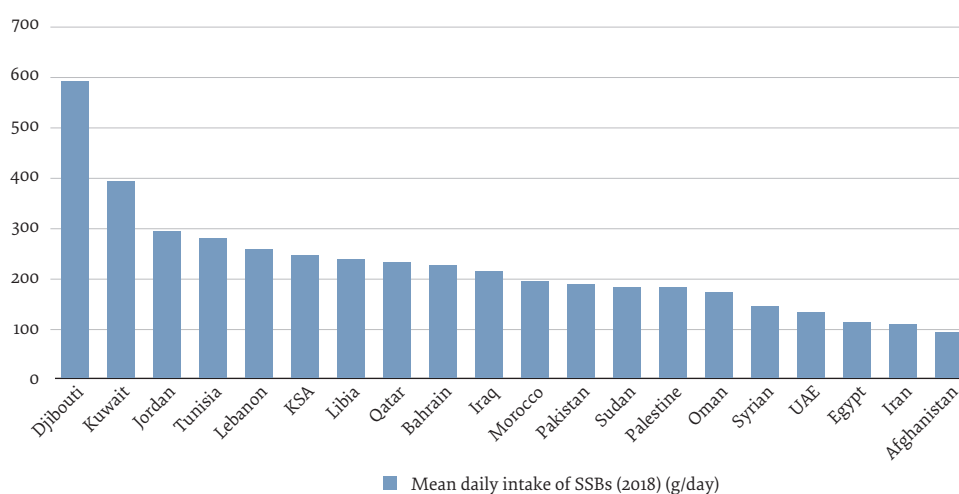
the scope of the taxes (SSBs categories covered); and the tax level among EMR countries. The different approaches taken by countries to tax SSBs is useful in identifying the best practices for improvement, while guiding those that have not implemented such taxes on the options available.

## Methods

Data were collected between July 2022 and June 2023 using a survey questionnaire which the focal points of the 22 EMR countries completed in collaboration with the ministries of health and finance. Survey respondents were asked to provide the price of a selected internationally comparable brand of carbonated SSBs, detailed tax information applicable to that brand, as well as other information on tax policy, such as whether the tax was automatically adjusted over time. Most part of the questionnaire focused on collecting price and tax information applicable to the selected internationally comparable brand of carbonated SSBs. Questions were also asked about whether the existing SSBs tax was applied to other types of predefined beverage categories, and the design and structure of the tax applied to those beverages. Some information on excise taxes was collected for 14 EMR Member States but price data and tax share estimates for carbonated SSBs were calculated for 11 countries that responded. Afghanistan, Bahrain, Djibouti, Islamic Republic of Iran, Kuwait, Libya, Qatar, Somalia, Sudan, Syrian Arab Republic and Palestine did not respond to the questionnaire. Data for Bahrain, Islamic Republic of Iran, and Qatar regarding the implementation and legislation of excise taxes were extracted from the WHO Global Database on the Implementation of Nutrition Action (GINA) (33).

The tax data collected focused on indirect taxes levied on SSBs (e.g. excise taxes on various types, import

**Figure 1 Mean daily intake of SSBs in Eastern Mediterranean Region**



\*SSBs defined as any beverage that has added sugar and contains > 50 calories per 248 g serving. This category includes energy drinks, fruit drinks, punch, lemonade, soft drinks, and aguas frescas. It does not include 100% fruit and vegetable juices, noncaloric artificially sweetened beverages, or sweetened milk. A 248 g serving is the standard serving size. The volume serving of a beverage with added sugar is measured in weight.

KSA = Kingdom of Saudi Arabia; SSBs = sugar-sweetened beverages; UAE = United Arab Emirates.

duties and value-added taxes). Information on tax levels, structure and design was validated through tax law documents, decrees and official schedules of tax rates and structures provided by data collectors and retrieved from ministerial websites, GINA or the World Bank global SSBs tax database (34). The price of a selected internationally comparable brand of carbonated SSBs was used as the basis for tax calculation as a share of the retail price.

Given the range of approaches taken by governments in setting tax rates, structures and bases, for comparison between countries, all applicable taxes were converted to a percentage of the tax-inclusive retail price using formulae that depended on the applicable tax structure in each country. The price of the chosen internationally comparable brand of carbonated SSBs was standardized to a volume of 330 ml and prices collected in local currency were expressed in international dollars at purchasing power parity (PPP), by dividing the retail price in local currency by the implied PPP conversion rates for 2022 from the International Monetary Fund World Economic Outlook. Further global analysis and additional details on the methodology are discussed in Section 9 (Technical notes) of the Global Report on the Use of Sugar-Sweetened Beverage Taxes (21).

The number of missing countries varied depending on the type of beverage because some countries did not provide information on the application of tax for each beverage identified. This was why a different denominator was used to calculate the percentage of countries that applied excise taxes to each type of beverage. The World Bank Group country classification for 2024 was used to categorize the EMR countries according to their income level (35).

## Results

### Excise tax policy for beverages in the EMR

As of July 2022, 11 countries in the EMR applied national-level excise taxes on carbonated SSBs. Ten countries applied excise taxes to at least one type of beverage other than carbonated SSBs (Table 1). Excise taxes were applied to energy and sports drinks in 9 of 10 countries; non-sugar-sweetened carbonated and noncarbonated mineral water (e.g. diet soft drinks) in 8 of 10 countries; and sugar-sweetened noncarbonated waters (e.g. lemonade) in 7 of 10 countries. Unsweetened bottled water is a healthy alternative to SSBs and non-SSBs and should be exempt from excise taxes; however, 5 of 10 countries applied excise taxes to it. Five of 8 countries applied excise taxes to sugar-sweetened syrups, liquid concentrates and/or powdered beverage preparations. Six of 8 countries applied excise taxes to fruit drinks with < 100% fruit juice, while only 2 of 10 countries applied excise taxes to 100% fruit juices, despite containing free sugars.

Sugar-sweetened milk-based drinks (including plant-based milk substitutes) are not often subjected to excise taxes in countries that apply them to carbonated SSBs

(applied by only 3 of 8 countries). Four of 8 countries applied excise taxes to sugar-sweetened ready-to-drink tea or coffee. Only Tunisia applied excise taxes to all types of SSBs as well as unsweetened bottled water. Morocco and Pakistan applied excise taxes to all SSBs, excluding ready-to-drink tea or coffee and milk-based drinks.

Based on the recent World Bank income groups, none of the low-income and upper-middle-income countries in the EMR applied excise taxation to SSBs. Five of 8 lower-middle-income countries applied excise taxes to at least one type of beverage other than carbonated SSBs, while 6 of 8 applied excise taxes to carbonated SSBs. All high-income countries, Gulf Cooperation Council (GCC) countries, excluding Kuwait (no data available) applied excise taxes to carbonated SSBs and energy drinks.

### Design of excise tax on carbonated SSBs in the EMR

Countries can decide to implement different excise taxes on SSBs. *Ad valorem* excise is a tax applied to the value of the product (e.g. the declared manufacturing price, cost, insurance and freight value, declared at import or the retail sales price). Specific excise is a tax applied to a defined volume of the targeted beverage, which can be based on the total volume produced or on the sugar content in grams per 100 ml of the beverage. Some countries apply both a specific and an *ad valorem* excise or a mixed system. *Ad valorem* excise taxes are the most-used type for carbonated SSBs, with 10 of 11 countries in the EMR applying them. They tended to be favoured by all 5 upper-middle-income and 5 of 6 lower middle-income countries. Only Morocco applied volume-based specific excise taxes on carbonated SSBs with different rates based on the sugar concentration of the beverages (Table 2).

In the EMR, 91% of countries applied excise taxes on carbonated SSBs using *ad valorem* structures (Table 2). The *ad valorem* excise tax rate may have different impacts on the retail price depending on the definition of its tax base value. Applying the *ad valorem* excise tax rate early in the value chain (e.g. producer/manufacturer) reduced its impact on retail prices. Only Jordan and Pakistan applied *ad valorem* excise taxes on carbonated SSBs setting their base value at the producer (manufacturer) price level (18%). High- and lower middle-income countries (100% and 50%, respectively) applied *ad valorem* excise taxes on the retail price excluding value-added and excise taxes.

### Tax and price shares

Globally, the median excise tax share for 330 ml of an internationally comparable brand of carbonated SSBs is 3.4%, while the median in the EMR was nearly double 8.3%. In the EMR, excise taxes represented the highest proportion of the retail price in Oman and United Arab Emirates (UAE) (31.7%), followed by Saudi Arabia (29%), and the lowest proportion was in Morocco (2.97%).

The median excise tax share globally was inversely related to income: 5.9% in low-income countries, 4.2% in lower-middle-income countries, 3.0% in upper middle-

Table 1. Type of excise tax applied to beverages other than sugar-sweetened carbonated drinks, EMR

Country	Unsweetened carbonated or noncarbonated bottled waters	Non-sugar-sweetened carbonated and noncarbonated mineral water (e.g. diet soft drinks)	Sugar-sweetened noncarbonated mineral waters (e.g. lemonade)	Fruit drinks (< 100% fruit juice)	Fruit juices (100% fruit juice)	Energy and sports drinks	Sugar-sweetened drinks (including plant-based milk substitutes)	Sugar-sweetened ready-to-drink tea or coffee	Sugar-sweetened syrups, liquid concentrate or powdered beverages
Bahrain	Not applicable	Ad valorem	—	—	Not applicable	Ad valorem	—	—	—
Egypt <sup>e</sup>	Ad valorem	Ad valorem	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Iraq	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Jordan	Ad valorem	Ad valorem	Ad valorem	Not applicable	Not applicable	Ad valorem	Ad valorem	Not applicable	Not applicable
Lebanon	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Morocco	Volume-based specific	Volume-based specific	Volume-based specific	Volume-based specific	Not applicable	Volume-based specific	Volume-based specific	Not applicable	Not applicable
Oman	Not applicable	Not applicable	Ad valorem	Ad valorem	Not applicable	Ad valorem	Not applicable	Ad valorem	Ad valorem
Pakistan <sup>ab</sup>	Ad valorem	Ad valorem	Ad valorem	Ad valorem	Ad valorem	Ad valorem	Not applicable	Not applicable	Ad valorem
Qatar	Not applicable	Ad valorem	—	—	Not applicable	Ad valorem	—	—	—
Saudi Arabia	Not applicable	Not applicable	Ad valorem	Ad valorem	Not applicable	Ad valorem	Not applicable	Ad valorem	Ad valorem
Tunisia <sup>a</sup>	Ad valorem	Ad valorem	Ad valorem	Ad valorem	Ad valorem	Ad valorem	Ad valorem	Ad valorem	Ad valorem
UAE <sup>c</sup>	Not applicable	Ad valorem	Ad valorem	Ad valorem	Not applicable	Ad valorem	Not applicable	Ad valorem	Ad valorem
Yemen	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

<sup>a</sup>In the carbonated or noncarbonated bottled waters (unsweetened) beverage type, only carbonated waters were taxed.

<sup>b</sup>In the sugar-sweetened syrups, liquid concentrates or powdered beverage type, syrups were subject to the tax but not powdered beverages. The Ad valorem excise was based on the printed price on the can, equivalent to the price without taxes and margins, effectively categorized as producer (manufacturer) price.

<sup>c</sup>Milk-based drinks were taxed if < 75% of content was milk-based or milk substitutes.

income countries, and 1.3% in high-income countries. This contrasts with the EMR where the median excise tax share decreased with income level; the high-income group (GCC countries) had a median excise tax share of 30.8% (10 times the global median), and the lower-middle-income group had a median of 8.8%.

For the total tax share for 330 ml of an internationally comparable brand of carbonated SSBs, the EMR reported the highest among other WHO regions (22%), and the global median total tax burden was 18.4%. In the EMR, total taxes represented the highest proportion of the retail price in Saudi Arabia (42.03%), followed by Oman, UAE (36.51%) and Tunisia (32.77%) (Figure 2). The lowest median total tax share in the EMR was in Lebanon and Yemen (10.10% and 11.11%, respectively), and neither country applied excise taxes on SSBs.

The EMR had the highest population-weighted excise tax levels with a PPP of 0.16, or 9.6% of the retail price. Price levels and taxes in PPP for EMR countries and regional and global averages are shown in Figure 3.

Only the Islamic Republic of Iran dedicated revenues from excise tax on SSBs to a specific health programme: 60% of the collected income was paid to the Ministry of Health for the treatment and prevention of diabetes, and 40% to the Ministry of Sports and Youth for the development of universal rural sports.

## Discussion

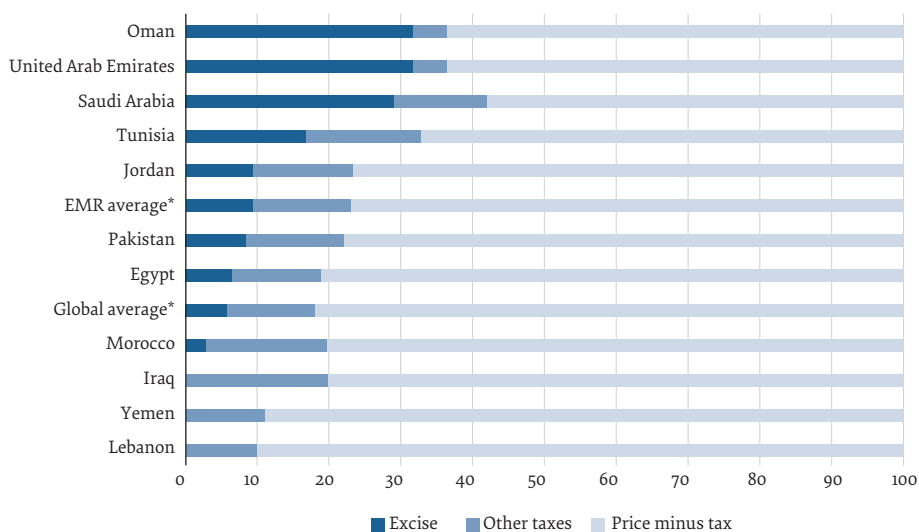
When considering health goals, excise taxes are the most significant type of consumption tax applied to SSBs. Value-added, general consumption and import taxes are too wide to target health-harming goods (14). Excise taxes can take different forms. Ad valorem excise, which is levied as a percentage of the value of a product, is the most prevalent type of excise levied on SSBs in the EMR (10 of 11 countries that applied an SSBs tax). Generally, it is not the preferred approach, even if the real value of the excise is preserved with increasing inflation, because it does not effectively target cheap products and requires strong tax administration capacity to ascertain the value declared at tax payment. Specific excise, however, is levied as a monetary value according to a certain physical characteristic of the product, such as its volume or sugar content (14). Morocco

**Table 2. Tax structure of sugar-sweetened carbonated drinks in EMR countries, 31 July 2022**

Country	Excise taxes applied to non-alcoholic beverages?	Type of excise tax applied on sugar-sweetened carbonated drinks	Uniform or tiered excise tax systema applied to sugar-sweetened carbonated drinks	If tiered, are the tiers sugar-content based?	Rates
Bahrain	Yes	Ad valorem	Uniform	Not applicable	SSBs and carbonated drinks: 50% of price exclusive of excise and VAT Energy drinks: 100% of price exclusive of excise and VAT
Egypt	Yes	Ad valorem	Uniform	Not applicable	Carbonated drinks: 8% of price exclusive of excise and VAT Not available
Islamic Republic of Iran	Yes	Ad valorem	Tiered	No	Not applicable
Iraq	No	Not applicable	Not applicable	Not applicable	Not applicable
Jordan	Yes	Ad valorem	Uniform	Not applicable	Carbonated drinks: 15% of manufacturing price
Lebanon	No	Not applicable	Not applicable	Not applicable	Not applicable
Morocco	Yes	Volume-based specific	Tiered	Yes	Sugar-sweetened mineral waters with < 10% fruit added or lemonades with < 6% lemon juice (or equivalent concentrated); (1) containing added sugar or ≤ 5 g/100 ml; 30 dinars/hl; (2) containing added sugar > 5 g but < 10 g/100 ml: 40 dinars/hl; and (3) containing added sugar of ≥ 10 g/100 ml: 45 dinars/hl. Sugar-sweetened mineral waters with > 10% fruit added or lemonades with ≥ 6% lemon juice (or equivalent concentrated); (1) ≤ 5 g/100 ml added sugar: 10 dinars/hl; (2) > 5 g but > 10 g/100 ml added sugar: 12.5 dinars/hl; and (3) ≥ 10 g/100 ml added sugar: 15 dinars/hl. Energy drinks with caffeine > 14.5 mg/100 ml but < 32 mg/ 100 ml: 600 dinars/hl.
Oman	Yes	Ad valorem	Uniform	Not applicable	SSBs and carbonated drinks: 50% of price exclusive of excise and VAT Energy drinks: 100% of price exclusive of excise and VAT
Pakistan	Yes	Ad valorem	Uniform	Not applicable	Aerated waters: 13% of printed price
Qatar	Yes	Ad valorem	Uniform	Not applicable	SSBs and carbonated drinks: 50% of price exclusive of excise and VAT Energy drinks: 100% of price exclusive of excise and VAT
Saudi Arabia	Yes	Ad valorem	Uniform	Not applicable	SSBs and carbonated drinks: 50% of price exclusive of excise and VAT -Energy drinks: 100% of price exclusive of excise and VAT
Tunisia	Yes	Ad valorem	Uniform	Not applicable	Nonalcoholic beverages (except noncarbonated unsweetened water): 25% of price exclusive of excise and VAT
United Arab Emirates	Yes	Ad valorem	Uniform	Not applicable	SSBs and carbonated drinks: 50% of price exclusive of excise and VAT Energy drinks: 100% of price exclusive of excise and VAT
Yemen	No	Not applicable	Not applicable	Not applicable	Not applicable

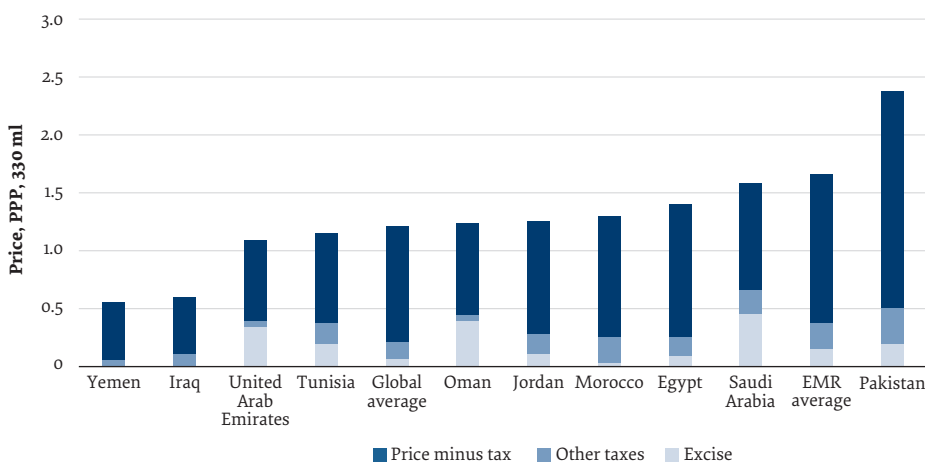
<sup>a</sup>Tiered excise taxes, means with different rates depending on product characteristics such as volume, sugar content, type of sweetener or type of beverage.  
SSBs = sugar-sweetened beverage; VAT = value-added tax.

**Figure 2 Price disaggregation of internationally comparable brands of carbonated SSBs, percentage of the price**



\*EMR and global averages were compiled in the *Global Report on the Implementation of Sugar-Sweetened Beverages Taxes, 2023*, based on the population-weighted averages of the price of the internationally comparable brand of carbonated SSBs, with 330 ml in purchasing power parity. EMR = Eastern Mediterranean Region; SSBs = sugar-sweetened beverages.

**Figure 3 Retail prices, excise and other tax levels of 330 ml of an internationally comparable brand of carbonated sugar-sweetened beverages on 31 July 2022, in international dollars**



\*EMR and global averages were compiled in the *Global Report on the Implementation of Sugar-Sweetened Beverages Taxes, 2023*, based on the population-weighted averages of the price of the internationally comparable brand of carbonated sugar-sweetened beverage, with 330 ml in PPP. EMR = Eastern Mediterranean Region; PPP = purchasing power parity

is the only country in the EMR that applies this type of excise tax where drinks are subjected to a tax rate applied on the volume of the beverage, with rates differing according to the sugar content. Some countries apply a mixed excise tax, which is a combination of *ad valorem* and specific taxes, but none of the EMR countries implemented this type of taxation.

Specific excise taxes are preferred from a public health perspective because they effectively target cheap products, reduce the incentives to switch to less-expensive brands, and are easier to administer (14). The United Kingdom of Great Britain and Northern Ireland, Mexico and South Africa have successfully applied specific excise taxes to SSBs and managed to reduce sugar consumption (36). The Moroccan excise tax policy overcomes the limitation of

the United Kingdom tax, for which the majority of fruit juices, juice drinks and smoothies are not eligible, despite having > 5 g/100 ml sugar (37). It is important to note that specific excise taxes need to be adjusted regularly by inflation, ideally at least annually, to ensure that the tax is not eroded over time (14).

Eight countries in the EMR tax non-sugar-sweetened carbonated or noncarbonated waters (e.g. diet soft drinks). Recent WHO guidelines advise that nonsugar sweeteners should not be used for weight control because they may potentially increase the risk of adverse health outcomes (21); therefore, other countries may consider applying excise taxes to non-sugar-sweetened beverages. Only Egypt applies excise taxes to unsweetened carbonated bottled water but exempts unsweetened noncarbonated

bottled water, while 5 countries in the EMR apply excise taxes to unsweetened bottled water, despite it being a healthy alternative to SSBs and non-sugar sweetened beverages. Those countries should consider removing such products from the list of excisable goods because their taxation is not justified on health grounds.

Nine of 11 countries in the EMR apply uniform excise taxes to carbonated SSBs, while only Morocco applies tiered taxes based on sugar content. Tiered taxes based on sugar content are preferred if the tax administration capacity is adequate because they may encourage consumers to switch to alternatives and companies may reformulate by decreasing sugar content and reducing their tax burden. However, the lowest tier should not exempt any SSBs from taxation (14).

Within the EMR and compared with other regions, GCC countries (Oman, UAE and Saudi Arabia) have one of the highest excise tax burdens, up to 30%, on SSBs (21), compared with < 20% in the other EMR countries. Since implementation of the excise tax on SSBs, the growth rate of sales decreased from 5.44% to 1.33% in Saudi Arabia, 7.37% to 5.93% in UAE, and 5.25% to 5.09% in Bahrain from 2016 to 2017, while in Oman, a reduction in sales volumes occurred from 3.60% to 2.99% between 2018 and 2019 (38). A cross-sectional study in Saudi Arabia showed that consumption of soft drinks decreased by 19% after implementation of taxes, and the reduction was 75% higher in individuals with obesity (39). In contrast, a study of Iranian households showed that average spending on SSBs increased between 2006 and 2016 despite taxation (40). This could indicate that the currently applied tax on SSBs is still too low to effectively reduce affordability of those products and their consumption.

According to the current data, none of the low-income EMR countries has implemented an excise tax on SSBs. The fear of possible regressivity of health taxes should not prevent countries from implementing and increasing taxes on unhealthy products such as SSBs because such fears are unfounded (14). Research indicates that low-income consumers are more sensitive to price or tax increases than higher-income consumers, supporting the idea that SSBs taxes are pro-poor policies (41, 42), as the former gain most of the benefit from reduced consumption through reduced burden of disease and avoided health costs. This could be seen in Mexico, where households with the fewest resources reduced their purchase of sugary drinks by 11.7%, compared to 7.6% for the general population (43).

Saudi Arabia is the only country in the EMR that has conducted several studies investigating the determinants of SSBs consumption and the impact of taxation on the key stakeholders (including government, industry and health organizations) and obesity (24, 39, 44). Stakeholders voiced concerns about the pressure coming from the World Trade Organization regarding justifying certain tax rates and beverage categories. Despite this, the government continued implementing a high tax that led to price increases and reductions in consumption (44).

Cautionary fiscal policies, such as sugar taxes, may not be sufficient on their own to address the obesity problem in the EMR and other regions. Integrated prevention and management strategies that target lifestyle behaviours and other downstream determinants of health, particularly in disadvantaged populations, are essential (15, 16). By considering a holistic approach, more effective interventions to combat obesity in the EMR could be implemented.

One limitation of this study is that it was based on data collected up to July 2022, and some countries have updated their taxation policies, such as Pakistan during 2023, and increased excise taxes and included more types of SSBs.

## Conclusion

The high and increasing prevalence rate of obesity in the EMR, particularly among children, calls for effective action to reverse the trend. One effective policy approach is imposing fiscal policies, particularly an excise tax on SSBs. However, only half the EMR countries are applying taxes to SSBs, and among half of those, the tax burden is <20%. A high SSBs tax that reduces affordability is necessary to lower the purchase and consumption of SSBs; therefore, EMR countries should raise the current SSBs taxes and do so regularly. Also, using the specific excise tax design based on the volume or sugar content of the beverage, as in Morocco, will be more effective at increasing prices. Placing SSBs taxes within national policy frameworks on NCDs could strengthen the political and legal mandates for action. Additionally, all types of SSBs, including fruit juices, should be included for taxation, while exempting unsweetened water products that are healthy alternatives.

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**Competing interests:** None declared.

## Analyse de situation relative à la taxation des boissons sucrées dans la Région de la Méditerranée orientale

### Résumé

**Contexte :** Le rôle des boissons sucrées dans l'augmentation des taux d'obésité et des cas de maladies non transmissibles liées à l'alimentation dans la Région de la Méditerranée orientale fait l'objet d'une attention particulière.

**Objectif :** Documenter les différentes approches utilisées par les pays de la Région concernant la taxation des boissons sucrées.

**Méthodes :** La présente étude a exploité les données concernant les taxes indirectes prélevées sur les boissons sucrées dans les 22 pays et territoires de la Région, collectées par l'OMS entre juillet 2022 et juin 2023. À des fins de comparaison entre les pays, toutes les taxes applicables ont été converties en un pourcentage des prix au détail TTC, puis normalisées.

**Résultats :** Onze pays ont imposé des droits d'accise nationaux sur les boissons gazeuses sucrées et 10 d'entre eux sur au moins un autre type de boisson. Les droits d'accise *ad valorem* étaient le type de taxe le plus utilisé pour ces produits, 10 des 11 pays les appliquant. Le Maroc a mis en place des droits d'accise spécifiques basés sur le volume, avec des taux pouvant varier en fonction de la teneur en sucre. Les droits d'accise représentaient la proportion la plus élevée (31,7 %) du prix au détail aux Émirats arabes unis et à Oman, tandis que la taxe totale représentait la proportion la plus élevée de ce prix (42,0 %) en Arabie saoudite et 36,5 % aux Émirats arabes unis et à Oman.

**Conclusion :** Seuls la moitié des pays de la Région de la Méditerranée orientale appliquent actuellement une taxation sur les boissons sucrées, et dans ces pays, la taxe est inférieure à 20 % dans la moitié des cas. Il est nécessaire que tous les pays de la Région mettent en œuvre une taxation sur ces produits dans le cadre de leurs politiques nationales de lutte contre les maladies, afin d'inverser la tendance croissante de l'obésité et d'autres maladies non transmissibles liées à l'alimentation dans la Région.

### تحليل حالة فرض الضرائب على المشروبات المحلاة في إقليم شرق المتوسط

مروة عباس، آن-ماري بروسيك، إيمان إبراهيم، أيوب الجوالدة

#### الخلاصة

الخلفية: هناك اهتمام كبير بدور المشروبات المحلاة بالسكر في زيادة معدلات السمنة والأمراض غير السارية المرتبطة بالنظام الغذائي في إقليم شرق المتوسط.

الهدف: هدفت هذه الدراسة الى توثيق النهج المختلفة التي تتبعها بلدان إقليم شرق المتوسط في فرض الضرائب على المشروبات المحلاة بالسكر.

طرق البحث: استخدمت هذه الدراسة بيانات عن الضرائب غير المباشرة التي فرضتها على المشروبات المحلاة بالسكر بلدان إقليم شرق المتوسط وأراضيه البالغ عددها 22، وهذه البيانات جمعتها منظمة الصحة العالمية في الفترة بين يوليو/ تموز 2022 ويونيو/ حزيران 2023. وللمقارنة بين البلدان، حُوِّلت جميع الضرائب المفروضة إلى نسبة مئوية من أسعار التجزئة الشاملة للضرائب مع توحيدها.

النتائج: فرض أحد عشر بلدًا من بلدان إقليم شرق المتوسط ضريبة بيع وطنية على المشروبات الغازية المحلاة بالسكر، وفرضت 10 بلدان ضريبة البيع على نوع واحد على الأقل من المشروبات بخلاف المشروبات الغازية المحلاة بالسكر. وكانت ضرائب البيع المحددة على أساس القيمة هي النوع الأكثر استخدامًا في حالة المشروبات الغازية المحلاة بالسكر، وطبقها 10 بلدان من بين 11 بلدًا. وفرض المغرب ضرائب بيع تحدّد على أساس الحجم بمعدلات متفاوتة بناءً على محتوى السكر. وكانت ضريبة البيع أعلى نسبة ضريبة (31.7%) في عُمان والإمارات العربية المتحدة، في حين كانت الضريبة الإجمالية أعلى نسبة (42%) من سعر البيع بالتجزئة في المملكة العربية السعودية، و36.5% في عُمان والإمارات العربية المتحدة.

الاستنتاجات: فرض الضرائب على المشروبات المحلاة بالسكر غير مطبّق حاليًا إلا في نصف بلدان إقليم شرق المتوسط، والضرائب المفروضة أقل من 20% في نصف هذه البلدان. وينبغي أن تبدأ جميع بلدان إقليم شرق المتوسط في تطبيق الضرائب على تلك المشروبات ضمن أطر سياساتها الوطنية لمكافحة الأمراض، من أجل المساعدة في القضاء على تزايد السمنة، وغيرها من الأمراض غير السارية المرتبطة بالنظام الغذائي في الإقليم.



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