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International Horizon Scanning and Learning Report

Fiscal levers to address obesity

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Overview

The International Horizon Scanning and Learning reports were initiated as part of the COVID-19 public health response, to support dynamic response and recovery measures and planning in Wales. The scope of the reports was expanded in spring 2022 to cover priority and emerging public health topics, including in the areas of health improvement and promotion, health protection, and healthcare. Report topics are requested by Welsh Government, Public Health Wales as well as wider NHS and Wales key stakeholders and partners. The report topics and findings are aligned with and help inform decision-making and on-going work in Welsh Government, the NHS, Public Health Wales, and the COVID-19 Public Inquiry. They are also disseminated to a wider network of (public) health professionals and partners nationally and internationally. The reports are produced quarterly.

This work is part of Public Health Wales' wider systematic approach to intelligence gathering and evidence translation into policy and practice, supporting coherent, inclusive, and evidence-informed action, which progresses implementation of the Wellbeing of Future Generations (Wales) Act and A Healthier Wales strategic plan towards a healthier, more equal, resilient, prosperous, and globally responsible Wales.

Disclaimer: The reports provide a high-level summary of international learning only based on real life experiences from selected countries and key global organisations, and from a variety of scientific and grey literature, including sources of information to allow further exploration. The reports are not comprehensive and are not aimed at providing a detailed evidence review, analysis or quality assurance. They are meant to offer a brief snapshot of current evidence, policy, and practice, and communicate relevant country examples and key (reputable) international bodies' research, guidance, tools, and principles.

In focus:

Fiscal levers to address obesity.

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Glossary

Ad-quantum excise tax: An excise tax applied as a specific amount £ per unit volume.

Ad valorem excise tax: An excise tax applied as a percentage of the value of a product.

Excise tax: Tax targeting specific products to increase their price relative to other consumer goods.

Fiscal policy: The use of government spending and taxation to influence the economy, or in this context to promote healthy diets.

Indirect/consumption tax: Taxes imposed on goods or services that cause consumers to pay higher prices.

Sales tax: Paid by the consumer at the moment of purchase of the taxed goods and services, usually applied at a uniform rate on all goods/services.

Selective tax: Tax applicable to a specific product.

Specific excise tax: An excise tax applied as a specific monetary amount per unit volume or quantity, also referred to as volumetric, ad quantum or per unit taxes.

Subsidies: Result in price incentives to consumers including through rebates, discounts, monetary vouchers, or coupons.

Tax base: The value, quantity, or volume of a taxable product on which a tax rate is applied.

Tax structure: Refers to the way a tax is designed. Excise taxes can be applied at a uniform (the same) tax rate or at a differential (tiered) rate. They can be also specific in nature, ad valorem or a mix of the two.

Tiered tax: Tax structure whereby rates vary within a taxed product category based on product characteristics.

Value Added Tax (VAT): Multistage tax levied on value generated at each stage of supply, usually a uniform rate.

At a glance: summary of international learning

“Fiscal policies that influence the relative price of foods and beverages have been repeatedly recommended as a policy option to promote healthy diets.”
WHO, 2022¹

Scope and focus of this report

- ✚ The focus of this report is on **fiscal policies** that promote healthy diets, including those that lower prices (**subsidies**) or increase prices (**taxes**) for specific food groups.
- ✚ Designing fiscal policies involves consideration of various policy elements including the tax/subsidy mechanism, products included in the tax/subsidy, the tax rate, use of the revenue and equity impacts.
- ✚ This **report examines fiscal levers by tax/subsidy mechanism**, followed by a summary of other policy design considerations.
- ✚ Regulatory policies including marketing controls and restricting the availability/use of unhealthy products are not within the scope of this report.

Key considerations

- ✚ Fiscal policies have been applied internationally and can make less healthy food/drink more expensive, and healthier items more affordable.
- ✚ Fiscal measures **require buy in, resource and adaption** to be successfully implemented.
- ✚ Fiscal measures are **not a single solution** and while they can have a positive impact on factors associated with overweight and obesity (i.e. purchase and consumption), wider measures for overweight and obesity are also required.
- ✚ Further work is required in relation to **identifying specific Welsh fiscal measures** compared to UK wide measures, in the context of the devolved nations.

Background

- ✚ Obesity is a **chronic complex multi-factorial condition** that can impair health and is caused primarily by an imbalance of calories consumed and calories expended.
- ✚ Obesity is a **major global public health concern** with the prevalence increasing in adults and children, causing significant health impacts and associated healthcare costs.
- ✚ Obesity **reduces life expectancy and quality of life**, leading to a range of noncommunicable diseases (NCDs) including cardiovascular diseases, type 2 diabetes, cancers, musculoskeletal disorders, and chronic respiratory diseases. Those living with obesity are also more likely to suffer from **mental health problems**.
- ✚ Obesity is **increasing inequalities** between countries and within populations, with both women and men with lower incomes more likely to be obese.

Solutions-Based Action

- ✚ Understanding of the complex factors that contribute to obesity has grown over the past decades, with current responses recognising the role of environmental influences (the ‘**obesogenic environment**’) that drive the obesity epidemic:
 - Unhealthy sociocultural, physical, and economic environments limit the availability of healthy food and hinder individuals’ ability to engage in sufficient physical activity.
 - Obesity prevention and control necessitates **multisectoral policies and actions** including structural, fiscal, and regulatory actions that make healthier food and beverage options and physical activity available, accessible, and desirable.

Fiscal levers

- ✚ Fiscal policies that influence the relative price of foods and beverages have been repeatedly recommended at the global level as a policy option to promote healthy diets.

- ✚ Although fiscal policies continue to be underutilised, there has been **considerable momentum in recent years**. As of 2024, **115 countries** have implemented sugar sweetened beverage (SSB) taxes and **41 countries** have implemented food taxes at a national level, with fewer countries so far implementing policies to subsidize healthier foods/beverages.
- ✚ In 2024, the World Health Organization (WHO) published guidelines to provide Member States with evidence-based recommendations for implementing fiscal policies, making a **strong recommendation to tax SSBs** and a **conditional recommendation to tax foods and utilise food subsidies** (based on the current limited evidence).
- ✚ There is currently **limited evidence of the health implications** of implemented measures, although modelling studies suggest significant impacts of taxes in reducing obesity and related diseases.

1. Taxes

- ✚ Most taxes used to improve diet are **indirect taxes**¹, including both **selective taxes (excise taxes)**² and **broad-based taxes (value added taxes (VAT)**³ and **sales taxes**⁴) (see Figure 2, page 7).
- ✚ There is broad consensus that selective excise taxes are the fiscal tool of choice for food and SSBs because they are most likely to lead to higher prices for specified products and thus decrease consumption.
- ✚ **Ad-quantum**⁵ excise taxes are likely to be more effective than **ad valorem**⁶ excise taxes:
 - They increase the price of all taxed products by the same amount, reducing the incentive for consumers to switch to cheaper options.
 - They provide more stable revenues, are not subject to industry price manipulation and are potentially easier to administer.
- ✚ International evidence shows that SSB taxes are associated with higher prices and lower sales of taxed beverages, with no evidence of substitution to untaxed beverages.
- ✚ Although the evidence to support food taxes is less consistent than for SSBs, it suggests that broad-based taxes tend to have a greater impact than narrow taxes because they discourage substitutions with unhealthy foods not covered by the tax.
- ✚ Some **countries have abolished taxes** following challenges with their implementation, including in Denmark and Finland. These challenges highlight the importance of tax designs that are easy to implement, well supported and with clear public health aims.

2. Subsidies

- ✚ To date, few countries have implemented policies to subsidize healthier foods and beverages or removed taxes as a means of encouraging healthier dietary patterns.
- ✚ With subsidies used less widely at scale, the **evidence base on their effectiveness is smaller**, although promising.
- ✚ The use of positive fiscal incentives, such as rate differentiation in VAT, is also increasingly being considered an option for incentivising healthy diets.

3. Taxes and subsidies

- ✚ There is growing evidence that **combining taxes with subsidies** for healthier options is likely to be the most effective approach to implement.

¹ Taxes imposed on goods or services that cause consumers to pay higher prices.

² Tax targeting specific products to increase their price relative to other consumer goods.

³ Multistage tax levied on value generated at each stage of supply, usually a uniform rate.

⁴ Paid by the consumer at the moment of purchase of the taxed goods and services, usually applied at a uniform rate on all goods/services.

⁵ Applied as a specific amount £ per unit volume.

⁶ Applied as a % of the value of the product.

Country Features

Hungary

- ✚ Introduced an ad quantum excise Public Health Product Tax in 2011 which is applied on pre-packaged foods and beverages with high salt, sugar, and caffeine content.
- ✚ The tax resulted in a significant decrease in the purchase of taxed products between 2010 to 2018, although there is evidence that over time consumption patterns began to revert.
- ✚ Part of its success has been attributed to government efforts to increase the accessibility of healthy food choices alongside the tax and the use of its revenue to fund public health.

Mexico

- ✚ Introduced a fiscal reform package in 2013 which included a 10% ad valorem excise duty tax on SSBs and an 8% tax on nonessential energy-dense foods.
- ✚ The tax resulted in a significant reduction in the sale of taxed foods in supermarkets and other retailers and encouraged food companies to reformulate their products.
- ✚ Framing the tax as generating revenue and implementing a media campaign to build public awareness helped overcome early opposition.

The United States

- ✚ National taxes have not yet gained substantial political traction, but sub-national level excise and sales taxes are utilised for both SSBs and fast foods/convenience foods.
- ✚ Sub-national taxes have seen demand for taxed foods and beverages and purchase volume decrease, although they do not have the broad effects of wider-ranging national taxes.
- ✚ A federal Supplemental Nutrition Assistance Programme (SNAP) provides supplemental food and nutrition education to low-income Americans. As well as reducing food insecurity, some evidence suggests SNAP has increased sales of fruits and vegetables.

An overview of the context in Wales is provided for reference in the Appendix.

Fiscal levers to address obesity

Scope and focus of this report

- The focus of this report is on fiscal policies that promote healthy diets including those that lower prices (subsidies) or increase prices (taxes) for specific foods and beverages (excluding alcohol) (see Figure 1).
- Most taxation to improve health is applied to goods and services (indirect taxes) rather than on specific individuals, businesses, or households (direct taxes) therefore taxes in this report refer to indirect taxes, including:
 - Selective taxes (ad valorem and ad quantum excise taxes)
 - Broad taxes (VAT and sales tax)² (see Figure 2).
- Subsidies in this report refer to those that result in price incentives to consumers, including through rebates, discounts, monetary vouchers or coupons¹. Subsidies to manufacturers or farmers are not covered¹.
- Regulatory policies including marketing controls and restricting the availability/use of unhealthy, or health harming products are not within the scope of this report³.

Figure 1: Flow diagram of fiscal lever typologies

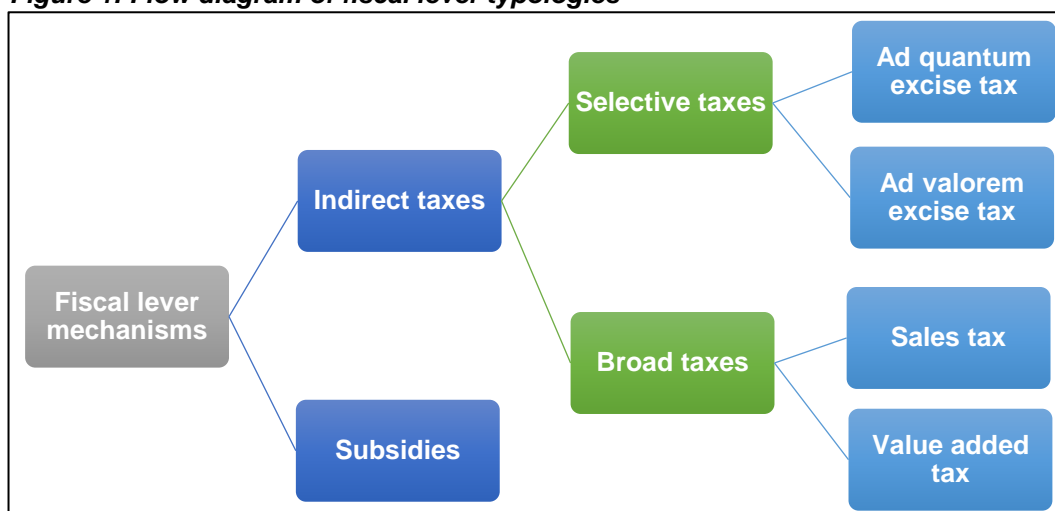


Figure 2: Taxation definitions

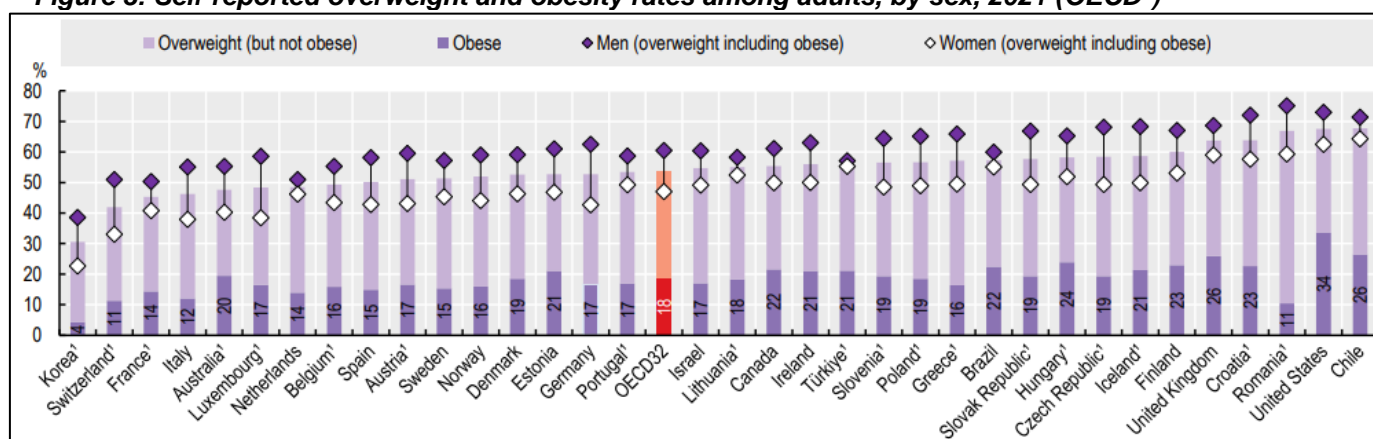
Indirect/consumption taxes: taxes imposed on goods or services that cause consumers to pay higher prices and may serve as price disincentives to consumers. There are various types of indirect taxes:

- **Selective taxes** (tax applicable to a specific product):
 - **Excise taxes** (indirect consumption taxes targeting specific products to increase their price relative to other consumer goods):
 - They can take the form of **ad valorem** excise taxes (applied as a % of the value of the product) or **ad quantum** excise taxes (applied as a specific amount £ per unit volume - also called specific/ volumetric/ per unit tax)
 - These types of excise tax can be applied at a **uniform** or differential (**tiered**) rate, and on their own or in combination (a mixed system).
- **Broad based taxes:**
 - **VAT:** multistage tax levied on value generated at each stage of supply, usually uniform rate
 - **Sales taxes:** paid by the consumer at the moment of purchase of the taxed goods and services, usually applied at uniform rate on all goods/services.^{1,2,3}

Background

- Obesity is a chronic complex multi-factorial condition defined by excessive fat deposits that can impair health⁴, fundamentally caused by an imbalance of calories consumed (particularly from foods high in fat and sugar) and calories expended⁵.
- Obesity is a major global public health concern, with the prevalence increasing and causing significant health impacts and associated healthcare costs⁶.
- Over a billion people were estimated to be living with obesity globally in 2022, including 160 million children and adolescents aged 5–19 years⁴.
- From 1990 to 2022, the rate of childhood and adolescent obesity increased four-fold (from 2% to 8%) globally, and adult obesity more than doubled (from 7% to 16%)⁵.
- The UK has one of the highest rates of obesity among high-income nations⁷:

Figure 3: Self-reported overweight and obesity rates among adults, by sex, 2021 (OECD⁸)



Impacts on health and wellbeing

Adults

- Obesity is a cause of mortality and morbidity because it is a major risk factor in many noncommunicable diseases (NCDs) including cardiovascular disease (mainly heart disease and stroke), type 2 diabetes, cancers (mainly endometrial, breast and colon), musculoskeletal disorders and chronic respiratory diseases^{5,9}.
- In 2019, obesity caused an estimated 5 million NCD deaths globally including from cardiovascular diseases, diabetes, cancers, neurological disorders, and chronic respiratory diseases⁹.
- Obesity and its complications can also reduce quality of life, including affecting movement and sleep and causing psychosocial consequences⁴.

Children

- Living with obesity in childhood increases the risk of premature onset of various NCDs including type 2 diabetes and cardiovascular disease⁴.
- Children and adolescents with obesity may experience bullying which can be associated with low self-esteem and depression¹⁰.

Wider social and economic impacts and inequalities

- Obesity also has wider social and economic impacts beyond health, with the global costs predicted to reach US \$3 trillion per year by 2030 and more than US \$18 trillion by 2060⁴.
- In the UK, the annual societal cost of obesity is at least 1–2% of Gross Domestic Product (GDP) from healthcare costs and lost productivity⁷, currently costing the NHS around £7.3 billion a year and social care £6.5 billion¹¹.
- Obesity is increasing health inequalities between countries and within populations, with both women and men with lower incomes more likely to be obese⁸.

Solutions-based action

- Understanding of the complex factors that contribute to obesity has grown over the past decades, with current responses recognising the role of environmental influences - the 'obesogenic environment', that drive the obesity epidemic^{12 13}.
- In this framework, obesity is understood within a context of unhealthy sociocultural, physical, and economic environments that limit the availability of healthy food and make it difficult to be sufficiently physically active during daily life¹⁴.
- Obesity prevention and control therefore necessitates multisectoral policies and actions including structural, fiscal, and regulatory actions that make healthier food options and physical activity available, accessible, and desirable¹³.

The case for fiscal levers

- There is consistent evidence that food and beverage purchases and consumption are inversely related to price, with the consumption of food and beverages decreasing as the price increases³.
- The WHO has called for the adoption of fiscal policies to promote healthy diets, including taxes to discourage consumption of less healthy foods and beverages, and subsidies to increase accessibility of healthier foods¹ (see Figure 4).
- Although fiscal policies continue to be underutilised, there has been considerable momentum in recent years and as of 2024:
 - **115 countries** have implemented sugar sweetened beverage (SSB) taxes at a national level and three at subnational level;
 - **41 countries** have implemented food taxes at a national level;
 - At present, fewer countries are implementing policies to subsidize healthier foods/beverages³ (see Figures 5 and 6).

Figure 4: Key WHO documents proposing fiscal measures to promote health

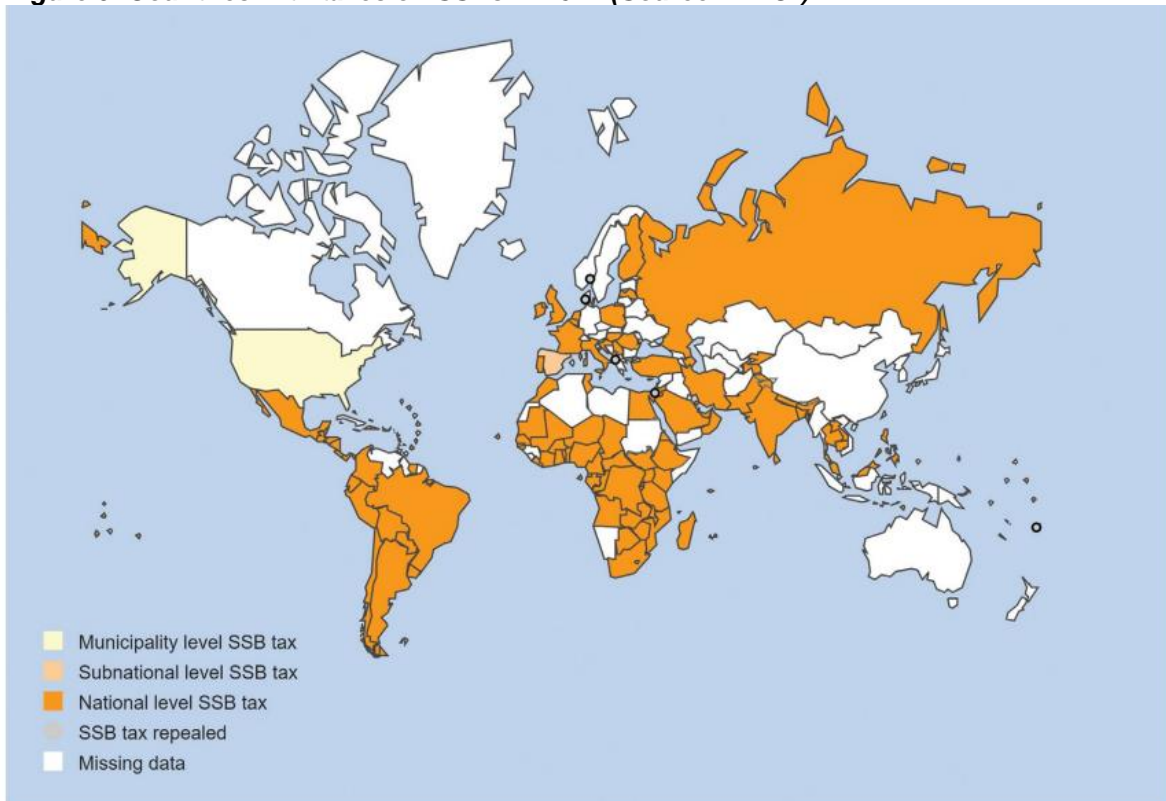
2004: Global Strategy on Diet, Physical Activity and Health
2012: Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition
2013: Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020, now extended to 2030
2014: Framework for Action to guide implementation of the commitments of the Rome Declaration on Nutrition
2016: Commission on Ending Childhood Obesity
2018: Political Declaration of the Third High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases
2023: WHO Acceleration plan to stop obesity
2024: Fiscal policies to promote healthy diets: WHO guideline

Figure 5: Countries with taxes on foods in 2024 (Source: WHO³)



Note: "Missing data" means either there has been no action to implement food taxes or the status is unknown.⁷

Figure 6: Countries with taxes on SSBs in 2024 (Source: WHO³)



Note: "Missing data" means either there has been no action to implement food taxes or the status is unknown.⁷

WHO guideline on fiscal policies to promote healthy diets

- The WHO published guidelines in 2024 to provide Member States with evidence-based recommendations for implementing fiscal policies, based on three systematic reviews³¹⁵¹⁶:

Figure 7: Fiscal policies to promote healthy diets – WHO guideline recommendations³

<ul style="list-style-type: none">● Strong recommendation on taxation of SSBs based on:<ul style="list-style-type: none">- Evidence of a large desirable effect on price change and purchases of taxed beverages- Negligible costs of implementation- Cost-effectiveness favouring taxes- Feasibility of implementation- Probable improved health equity● Conditional recommendation on taxation of foods:<ul style="list-style-type: none">- Low certainty of evidence from a limited number of real-world policy evaluations and evidence from modelling studies that food taxes can have a large desirable effect- Probable acceptability, feasibility, and cost-effectiveness- Potential to increase equity● Conditional recommendation on targeted food subsidies:<ul style="list-style-type: none">- Low certainty of evidence on a subset of targeted food subsidies (with the evidence appearing to indicate desirable effects)- Probable acceptability, feasibility, and cost-effectiveness- Potential to increase equity

Fiscal lever mechanisms

- Fiscal policies to promote healthy diets include both taxes and subsidies.
- Designing fiscal policies involves consideration of various policy elements including the tax/subsidy mechanism, products included in the tax/subsidy, the tax/subsidy rate and use of the revenue¹.

Taxes

- Most of the current evidence on the impact of taxes is for SSBs, with the majority of studies on food taxes based on modelling.
- There is currently limited evidence of the health implications of implemented taxes, with most evidence available on intermediate indicators of the tax's effect such as reductions in purchasing and consumption¹.
- Modelling studies, although theoretical, suggest significant impacts of taxes in reducing obesity and related diseases¹.
- Most taxes used to improve diet are indirect/consumption taxes, including both selective and broad-based taxes¹.

1. Selective taxes

- From a public health perspective, excise taxes are usually preferable to broad-based taxes because:
 - They are applied to specific products, decreasing their affordability relative to other products, whereas VAT and sales taxes usually apply to a broad range of goods and services, and do not affect the relative price of the product¹.
 - Compared with sales taxes, 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 change¹.
- Excise taxes can be ad quantum or ad valorem:

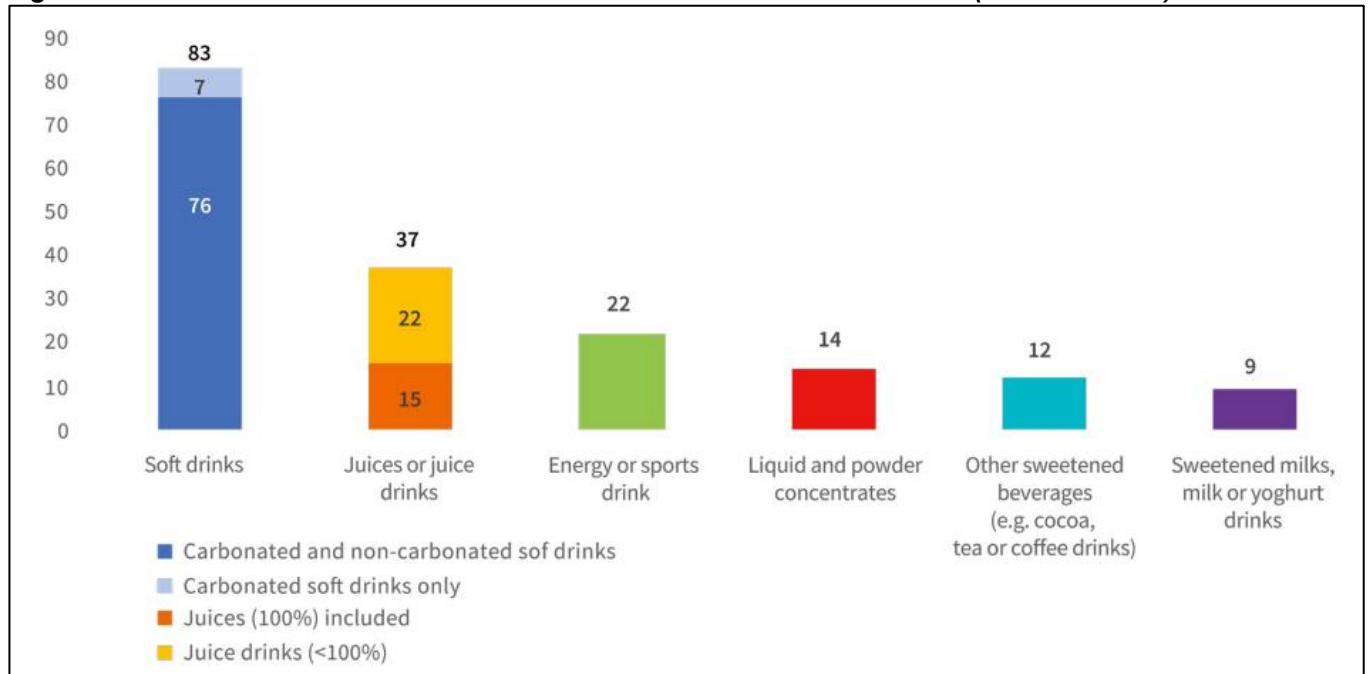
1.1 Ad quantum excise taxes

- Ad-quantum excise taxes are the most common health taxes applied to food and SSBs¹⁷ and are likely to be more effective than ad valorem excise taxes because:
 - They increase the price of all taxed products by the same amount, reducing the incentive for consumers to switch to cheaper options¹.
 - They provide more stable revenues, are not subject to industry price manipulation and maybe easier to administer¹⁸.
 - However, they need to be regularly adjusted in line with inflation and income growth to ensure they remain effective¹.

Sugar Sweetened Beverage (SSB) taxes

- International evidence shows that SSB taxes are effective. For example, a recent global review of implemented SSB taxes found the taxes were associated with higher prices and lower sales of taxed beverages, with no evidence of substitution to untaxed beverages¹⁹.
- Excise taxes are the tax type most used for SSBs, with specific excise taxes based on nutrient content (e.g. on sugar content) likely to have a larger impact because they encourage consumers to substitute to healthier untaxed substitutes and encourage industry to reformulate¹.
- SSB taxes include both tiered (e.g. in the UK and Portugal), and single-tiered (e.g. in Mexico, Denmark, France, Finland, Hungary) designs. Taxes that are tiered rather than uniform may encourage consumers to substitute to foods and beverages containing lower levels of the targeted nutrient as well as encourage industry to reformulate foods and beverages¹.
- There is large variation globally in the products subject to SSB taxes, with some taxes excluding 100% fruit juices and milk-based drinks from the taxable products and others based only on content with added sugar, not free sugars³:

Figure 8: Products taxed in national level SSB taxes in WHO Member States (Source: WHO¹)



- For example, the **UK Soft Drinks Industry Levy** (see Appendix, page 23) does not include sugary milk-based drinks, with calls for the Government to include sugary milk-based drinks in the levy⁷. Furthermore, calls have been made to extend the levy to foods high in fat, sugar, and salt (HFSS):

Figure 9: Proposed UK Sugar and Salt Reformulation Tax^{20 21}

- The **National Food strategy** (2021) proposed introducing a **£3/kg tax on sugar and a £6/kg tax on salt** sold for use in processed foods, restaurants, and catering businesses.
- Modelling suggests this tax would reduce the average calories eaten per person per day by 15-38 kcal, enough to completely halt weight gain at a population level according to the UK's expert group on calorie reduction.
- The tax could **raise £2.9–£3.9 billion per year** for the Treasury.
- Proposal to use some of the revenue on fresh fruit and vegetables for low-income families.
- Some evidence of **public support**, with recent Health Foundation (2024) polling finding 59% of people in the UK support a tax on foods high in fat, sugar, and salt.

Food taxes

- Evidence to support food taxes is less consistent than for SSBs. It suggests that broad-based taxes on HFSS foods encompassing a diverse array of unhealthy food items tend to have a greater impact compared to narrow taxes, as broader taxation may discourage unhealthy food substitutions more effectively^{17 22}. For example, **Hungary's Public Health Product Tax** is a specific excise tax applied to a range of products with high sugar, salt or caffeine content which has been associated with a reduction in consumption by – 3.4 % and reduced sales between – 6% to 12 % (see Hungary case study, page 17)^{17 23}.
- There are also examples of **countries abolishing specific excise taxes** on foods following challenges with their implementation, including **Denmark and Finland**. These challenges highlight the importance of tax designs that are easy to implement, well supported and based on clear public health goals like in Hungary where revenue from the tax is allocated to public health¹⁷:

Figure 10: Case study - abolished specific excise taxes^{1,17,24}

Denmark

- In 2011, a specific excise tax was introduced on foods containing over 2.3% **saturated fats**.
- Studies showed a statistically significant reduction on consumption of taxed products between – 4% to – 6% and the tax significantly ($p < 0.05$) reduced purchases by –0.9 %.
- However, the tax was abolished after one year due to **poor support and challenges in implementation**:
 - Danish shoppers found ways to circumvent the tax by purchasing items across the border.
 - The tax was opposed by farmers and food companies who complained it was bureaucratically complex and could place jobs at risk.
 - It was introduced mainly to increase public revenue rather than improve public health.

Finland

- In 2011, a specific excise tax was introduced on **confectionery and ice cream** but excluded products such as biscuits, baked goods, puddings, and granulated sugar.
- The tax was abolished in January 2017 following **criticism from food producers who argued the tax violated EU state aid rules** on fair and equitable treatment by selectively targeting specific products.

1.2 Ad valorem excise taxes

- Fewer countries are using ad valorem excise taxes on unhealthy food and drinks, but examples include countries with more established taxes like Mexico, and countries with recently implemented taxes like Columbia.
- **Mexico**, a country leading the way in implementing taxes on unhealthy food and drinks, has an established national ad valorem excise tax on **non-essential energy dense food**,

in place since 2014 which has seen a reduction in the sale of taxed foods of 18% in supermarkets and up to 40% in other retailers²⁴ (see Mexico case study, page 19).

- Although it is too soon to know the effectiveness, in **Columbia** a national ad valorem excise tax has recently been introduced on **ultra processed foods (UPFs)** alongside a tiered tax on SSBs²⁵:

Figure 11: Case study - newly introduced UPF tax^{25 26 27}

Columbia UPF tax

- After years of campaigning, in November 2023 Columbia became **one of the first countries in the world** to implement a tax on UPFs.
- The **national ad valorem excise tax** is on edible products from food-derived substances along with additives (added sugars, sodium, and saturated fats) that surpass a threshold:
 - ≥ 1 mg of sodium per 1 kcal and/or ≥ 300 mg of sodium per 100 g
 - $\geq 10\%$ of total energy from free sugars
 - $\geq 10\%$ of total energy from saturated fats
- Tax rates will increase from **10% in 2023 to 20% in 2025**.
- **Compromises have been made with the public and food industry**, such as excluding some traditional Colombian foods like *salchichón* sausage from the tax.
- The tax policy is **aligned with front-of-package labels** – they are also introducing mandatory health warnings on foods with high content of unhealthy ingredients, such as sugar or saturated fat, and the tax is applied to the same products that have the health warning label to create an information and a financial incentive for the consumer to avoid these products.

2 Broad based taxes

- Broad based taxes include sales taxes and VAT:

2.1 Sales taxes

- There are limited examples of sales taxes applied to food and non-alcoholic beverages, with most being in the USA at sub-national level and limited studies found (see USA case study, page 20).
- In 2014, the Navajo Nation passed the Healthy Diné Nation Act, which combined a 2% tax on foods of minimal-to-no-nutritional value with a waiver of a 5% sales tax on healthy foods²⁸. A study in 2019 found the availability of fresh vegetables and fruits was greater in convenience stores in Navajo compared to border town stores following implementation of the tax²⁹.

2.2 Value Added Tax (VAT)

- Differentiation of VAT rates on foods and beverages is increasingly being considered an option for incentivising healthy diets¹⁷ (see Figure 12).
- In the **UK**, most food and drink categories are exempt from VAT, but many unhealthy food options are not (including alcohol, confectionery, crisps, and takeaway meals) and so VAT therefore acts to raise prices on these products and promote healthier options²:
 - However, there are several exemptions and inconsistencies in the system that limit the effectiveness of this tax, for example: all breakfast cereals are VAT exempt, even those with high levels of sugar; flapjacks and corn chips are VAT exempt whereas cereal bars and crisps are not; bottled water is subject to VAT².
 - A tiered approach to VAT has been proposed to address this, with the unhealthiest products subject to a higher rate which could then be used to subsidise healthier alternatives such as fruit and vegetables³⁰.

Figure 12: Case study - EU VAT rate on fruit and vegetables^{31 32 33 34}

- In 2022, the EU agreed to offer Member States the option to set the **VAT rate on fruit and vegetables at 0%**:
 - Countries that have reduced their VAT rates on fruit and vegetables include Portugal, Ireland, Italy, Cyprus, Spain, and Latvia, although there is a lack of evidence on the effectiveness.
 - Some countries have also faced **challenges**, for example the **Netherlands** proposed implementing a 0% VAT on fruit and vegetables, but it has been delayed due to disagreements between fiscal and health experts and is yet to be implemented.

Subsidies

- To date, few countries have implemented policies to subsidise healthier foods and beverages or remove taxes as a means of encouraging healthier dietary patterns³⁵.
- With subsidies used less widely at scale, the evidence base on their effectiveness is smaller, although promising²:
 - A recent systematic review conducted by the WHO found the majority of food subsidies target fruits and vegetables, with most studies conducted in the USA where the **Supplemental Nutrition Assistance Programme** (SNAP) provides food-purchasing assistance for low-income people¹⁶ (see USA case study, page 20). Although the certainty of evidence was very low, available studies showed fruit and vegetable subsidies to low-income populations were associated with increased sales of subsidised products.
 - However, a small number of studies have found an associated increase in total energy intake and possible stigma for low-income consumers^{15 36}.
 - In the UK, the **Healthy Start Scheme** aims to improve the health of low-income pregnant women and families with young children receiving benefits and tax credits by distributing vouchers for healthy foods such as fruit, vegetables, and cow's milk². Evidence suggests the scheme is effective in increasing spending on fruit and vegetables and improving the nutritional content of households' shopping baskets³⁷ with calls to increase the value of payments and widen eligibility⁷ (see Appendix, page 22).

Combining taxes with subsidies

- There is growing evidence that combining taxes with subsidies is likely to be the most effective approach¹.
- For example, a recent systematic review (2024¹⁷) found when taxes were combined with subsidies for healthier foods (such as foods with no added sugar or salt, foods low in saturated fat, whole-grain foods, fruits, and vegetables), there was an increased uptake of the subsidised foods and greater reduction in the consumption of taxed items.

Other fiscal policy design considerations

- To be effective, fiscal policies must be well designed and administered. Although beyond the scope of this report to discuss in detail, there are a range of considerations in addition to the tax/subsidy type including the products included in the tax/subsidy, the tax/subsidy rate, use of revenue and equity impacts³:

What products to tax/subsidise

- The criteria for healthier or less healthy products for taxation or subsidy are important for outcomes, acceptability, and feasibility of implementation.
- For example, taxes on simply defined foods like SSBs may be more straightforward to implement than taxes targeting multiple nutrients, especially in countries with low resources¹.

- Nutrient profile and other models can help define products for tax/subsidy and may be less likely to have unintended consequences than taxes based on individual nutrients as they are less likely to also include healthier foods/beverages¹.
- Taxes targeting an individual nutrient may encourage reformulation and have a widespread effect but may be administratively burdensome to implement because they apply to a wide range of foods³.
- The impact of taxes on purchases and consumption is influenced by the availability and cost of substitutes or alternative options. Therefore, it is important to ensure healthy substitutes and options are available, for example through subsidies³.
- The current evidence base suggests subsidy policies can have a high administrative burden than taxation policies and require ongoing resources to implement³.

Tax/subsidy rate

- International evidence reviews show implemented tax rates vary significantly, ranging from 1% to 25%¹⁷.
- Country-specific modelling exercises can simulate the potential impact of a tax/subsidy on prices, purchases, tax revenues and health outcomes³.
- The tax/subsidy rate must be high enough to deter consumption and the public health impact is likely to be larger where the tax rate is higher for the product³.
- The tax rate of specific excise taxes should be regularly adjusted in line with inflation and income growth, to ensure persistent effectiveness¹.

Equity considerations

- The possible financial regressivity of taxes must weighing up against the health benefits³. Although understudied, most studies show lower socioeconomic groups reduced their consumption of taxed products more compared with other socioeconomic groups and the health benefits are likely to be progressive^{1,17}.
- Interventions targeting lower socioeconomic group, such as subsidies on healthy foods, have the potential to reduce health inequities¹.

Country insights

The following countries are featured as they provide insights and learning from their experiences of implementing different types of fiscal measures to promote healthy diets:

1. **Hungary** introduced an ad quantum excise Public Health Product Tax in 2011 which is applied on pre-packaged foods and beverages with high salt, sugar, and caffeine content.
2. **Mexico** introduced a fiscal reform package in 2013 which included a 10% ad valorem excise duty tax on SSBs and an 8% tax on nonessential energy-dense foods.
3. **The United States** implements sub-national level excise and sales taxes on both SSBs and fast food/convenience food and has a federal Supplemental Nutrition Assistance Programme (SNAP) that provides supplemental food and nutrition education to low-income Americans.

Hungary

Background

- Obesity in Hungary is amongst the highest in the EU with self-reported data from 2019 classifying 24% of the population as obese, and measurement of BMI indicating even higher rates of 33%, an increase from 29 % in 2009³⁸.
- Obesity rates are particularly high amongst men, with self-reported data from 2019 classifying 26% of men as obese compared to 23% of women³⁸.
- According to survey data, 25% of Hungarian 15-year-olds were overweight or obese in 2022, the fourth highest rate in the EU³⁸.
- According to survey data, 14% of children aged 7 years were obese in 2018-2020, 15% of boys and 12% of girls³⁹.

Fiscal lever mechanisms

- Hungary introduced an ad quantum excise tax known as the **Public Health Product Tax** in 2011:
 - The tax is applied on pre-packaged foods and beverages with high salt, sugar, and caffeine content.
 - Tax rates vary depending on the product category.
 - Taxed products include SSBs, energy drinks, confectionery, salted snacks, condiments, stock cubes and fruit jams⁴⁰.
- The aim of the tax was to:
 - Lower the consumption of food products high in sugar, salt, and caffeine,
 - Promote the reformulation of processed foods,
 - Generate additional revenue to support health services⁴⁰.
- The tax is payable by the individual or company at the first point of sale, the manufacturer (when located in Hungary) and the first domestic seller (when imported into Hungary)⁴⁰.
- **Policy Implementation process**⁴⁰:
 - Data from population dietary surveys, population estimates of obesity, and an analysis of the nutritional composition of the different types of foods that were contributing to poor diets were utilised to develop this policy.
 - The Minister of Health convened a working group which brought together the National Institute for Health and Development, the National Institute for Food and Nutrition Science, the Ministry of Finance, and the WHO.
 - Stakeholder involvement included the food industry who were engaged to demonstrate that the tax was proportionate and teachers who advocated for the inclusion of energy drinks in the proposals for the product tax.

- In 2016, the tax law was amended to allow companies subject to the public health product tax to deduct up to 10% of their tax liability to fund health promotion programmes. In 2017, another amendment allowed companies to donate up to 10% of their tax liability to healthcare providers to support health promotion activities.
- National media was initially unsupportive of the tax, and perpetuated similar criticism to the food industry that the tax was discriminatory and regressive. In response, the Secretary of State, and the public health sector more broadly, initiated several campaigns and engaged with the media to explain the importance of the tax.

Impact

- Initial results showed a significant decrease in the purchase of taxed products between 2010 to 2018⁴¹:
 - The tax was associated with a reduction in consumption by –3.4 % and reduced sales between – 6% to 12%.
 - Findings indicated that confectionery intake decreased by 3%, while unprocessed food intake increased by 1%.
 - Approximately 40% of unhealthy food product manufacturers changed their product formulas to either reduce or eliminate unhealthy ingredients (28% and 12%, respectively) following introduction of the tax⁴⁰.
 - According to one study, moderate improvements in population diet may have been attributable to the tax¹⁷.
- However, there is evidence that over time the consumption patterns began to recover, correlating with increases in disposable income⁴².
- One study found that smaller producers were adversely affected by the tax implementation (financial losses and employment reduction) which caused producers to substitute salt and sugar with artificial ingredients⁴³.
- Part of its success has been attributed to government efforts to increase the accessibility of healthy food choices alongside the tax. However, there is some evidence of unhealthy food substitution with consumers switching to items with the targeted nutrients (salt, sugar, etc.) that were not taxed, such as baked goods, ice cream, fresh confectionery⁴³.
- The tax has been effective in generating substantial revenue, which is used to fund healthcare and health-promoting programmes. For instance, the revenue increased from 19.49 billion HUF in 2012 to 59.19 billion HUF in 2020 (equivalent to £127.5 million)⁴⁴.

Lessons learned

- **Strong leadership:** The government stood by its proposals for the public health product tax and faced down a challenge from the European Commission⁴⁰. The Ministry of Health sought out supporters of the tax from across the health and NGO sectors to counter the negative coverage that the tax was receiving in the media⁴⁰.
- **The need to develop public support:** Revenue from the tax is allocated to public health, with studies suggesting this increases public support for health taxes¹.
- **Good baseline data:** The tax was underpinned by data about consumer behaviour, the composition of processed food and drink products formulating the tax, and evidence about the impact of different nutrients on health outcomes⁴⁰. This helped dispute the arguments made by the food industry and persuaded the European Commission that the tax was proportionate⁴⁰.
- **A clear rationale underpinning the products that were taxed:** The tax is applied to a well-defined set of food items targeted for their negative impact on public health, which provided a strong justification for the intervention and contributed to its acceptability⁴⁰. The ingredient-based tax also provided an incentive for producers to reformulate products⁴⁰.
- **Continued monitoring:** The tax has had to be revised five times to close loopholes in the legislation that had enabled manufacturers to replace the taxed ingredients in their products with unhealthy but tax-exempt ingredients⁴⁰.

Mexico

Background

- Obesity is the leading public health concern in Mexico and has been on the rise for the past 30 years⁴⁵.
- Thirty-six percent of the population aged 15+ years are obese (measured data, 2020-2022) with over 70% overweight or obese⁴⁶.
- In contrast to most countries, the prevalence of obesity is substantially higher in women than in men (40.2% versus 30.5%)⁴⁵.
- Obesity prevalence in adults in the poorest regions of Mexico is similar to that of high-income areas⁴⁵.
- Evidence suggests equally high rates in school-age children, where the overweight and obesity trends have increased by 2.5% when comparing prevalence from 2006-2021 (34.8% in 2006 to 37.3% in 2021)⁴⁷.
- The main causes of mortality are associated with obesity, including cardiovascular diseases, type 2 diabetes, malignant tumours, and liver diseases⁴⁵.
- Obesity was estimated to have cost 5.3% of total GDP in 2019, one of the highest amounts globally⁴⁸.
- Twenty-three percent of the Mexican population's total dietary energy comes from UPFs and Mexico is one of the countries with the highest per capita consumption of SSBs, which account for approximately 10% of total daily energy intake in adults and children and make up 70% of total added sugar in the diet⁴⁵.

Fiscal lever mechanisms

- In 2013, Mexico imposed a fiscal reform package which included:
 - A 10% ad valorem excise duty tax (1 peso/L) on SSBs.
 - An 8% tax on nonessential energy-dense foods (classified as products that contain 275 kcal or more for every 100g) including chips and snacks, confectionery, chocolate and cacao-based products, puddings, peanut/hazelnut butters^{49 50 51}.

Impact

- The **food tax** was associated with statistically significant reductions in HFSS consumption¹⁷:
 - Sugar consumption decreased by 2%.
 - Taxed food consumption saw a 3% reduction.
 - Sales of taxed items decreased by 18% in supermarkets and up to 40% in other retailers.
 - Overall, taxed food purchases exhibited a 6% decrease.
- The **SSB tax** is also estimated to have reduced national consumption:
 - One-year post-SSB tax implementation, purchases of taxed beverages decreased by 6% on average. Purchases continued to be lower (9.7% average reduction) two-years post-SSB tax implementation⁵².
 - As with the food tax, there is evidence that reductions in SSB sales have been greater for low-income households⁵³.
 - A modelling study using published data on the reductions in beverage purchases due to the SSB tax. The study modelled the expected long-term impacts on BMI, obesity, and diabetes, showing an average BMI reduction of 0.15 kg/m² per person, which translates to a 2.5% reduction in obesity incidence. People with the lowest socioeconomic status and those between 20 and 35 years of age had the greatest reductions in BMI and in the prevalence of overweight and obesity⁵⁴.
- Low-income groups, who were greater consumers of the taxed foods and beverages beforehand, showed the largest reduction in consumption once the tax was implemented⁵⁵.

- A recent study found that the tax had no impact on employment in the manufacturing industry or retail industry⁵⁶.

Lessons learned

- Passing the taxes was difficult and required **high-level cooperation and planning**⁵⁷.
- The National Institute of Public Health, academics and NGOs played a critical role in generating **scientific analysis** and presenting the results to both the public and government officials⁵³.
- **Framing the tax as generating revenue** helped get the proposal onto the policy agenda and enabled buy-in from the Ministry of Finance⁵³.
- A civil society coalition led a strong, award-winning **media campaign** that tapped into Mexican popular culture to build public awareness and helped shape public perception that Mexico’s obesity epidemic was driven in part by sugar/SSB consumption⁵⁸.

United States of America (US)

Background

- According to 2023 Centre of Disease Control survey data, 40.3% of adults (more than 100 million) in the US are obese, and 9.4% (22 million) of these are severely obese^{59 60}.
- Obesity is highest in adults aged 40–59 years (46.4%) compared to those aged 20–39 (35.5%) and 60+ (38.9%)⁶⁰.
- No significant differences in obesity rates by biological sex (male/female) were observed⁵⁹.
- 58% of US adults with obesity have high blood pressure and 23% have diabetes⁵⁹.
- 14.7 million children and adolescents aged 2-19 years were obese in 2020, with a prevalence rate of 19.7%⁶¹.

Fiscal lever mechanisms

- The US is distinct from most other countries in that fiscal measures to address unhealthy diets are currently only implemented at the **sub-national level**, including some **excise and sales taxes**⁶². There is also a federal **Supplemental Nutrition Assistance Programme (SNAP)** that provides supplemental food and nutrition education to low-income Americans.
- Although local taxes are growing in popularity, on SSBs in particular, evidence suggests the effects are not as broad or wide ranging as national taxes might be⁶³.
- However, national taxes have not yet gained substantial political traction, with political feasibility often greater at the local or state level⁶³:
 - While implementing national policies may be possible in the US, checks and balances (e.g., bicameral legislature, presidential veto power) and powerful interest groups present significant obstacles, with some taxes being repelled post implementation⁶⁴.
 - For example, Cook County, Illinois, introduced an excise tax on the retail sale SSBs which was repelled four months post implementation with an evaluation finding challenges including implementation confusion, inconsistent messaging regarding tax purpose and media influencing anti-tax backlash⁶⁵.

1. Excise taxes – city-based specific SSB taxes

- Between 2015 and 2018, seven U.S. cities (Berkeley, Oakland, Albany, San Francisco, Boulder, Philadelphia, and Seattle) introduced specific excise taxes on SSBs^{66 67 68 69 70 71 72}.
 - Taxes rates varied from \$0.01 to \$0.02 per ounce.
 - Items included in the tax varied (i.e. SSB only or both SSB and artificially sweetened beverages).

- Excluded items included milk/milk-based beverages and 100% natural fruit juice for most taxes.
- Some taxes targeted distributors whilst others impacted retail at the point-of-sale.

Impact and lessons learned

- **The impact of taxes pass-through effect:** For SSB taxes to achieve their intended public health effect of reducing SSB consumption, taxes must be passed on to consumers in the form of higher prices⁷³. A recent scoping review found that tax-pass through rates varied widely by city: Berkley (43.1% - 100%), Boulder (75%), Oakland (60-144%), Seattle (58-104%) and Philadelphia (137%)⁷⁴.
- **The impact of taxes on demand, sales and consumption** are key emerging themes from the evidence-base, although this does not directly infer reductions in the prevalence of obesity and overweight⁶⁷:
 - Studies evaluating US local SSB taxes have found that average demand for taxed beverages decreased by 20%⁷⁵ and the taxes led to a 33% reduction in purchase volume, with no corresponding increase in cross-border purchases⁷⁶.
 - However, results from a recent scoping review appear to be less consistent with some studies of singular city-based taxes finding no impact on consumption⁶⁷.
- **Use of SSB tax revenues:** Across the seven US cities with taxes, the average annual revenue from SSB taxes totalled \$133.9 million in 2021, with \$65.8 million of that allocated to support health services⁷⁷.

2. Fast Food/Convenience Food Tax

- Taxes on fast food/convenience food have also been implemented at the state level in the US, although they are not widely used and are mainly low-level sales taxes for revenue production goals on specific 'snack food' products (e.g., chips, pretzels, nuts)⁷⁸.
- Three states implemented snack food sales taxes that were later repealed:
 - Policymakers listed retailers' difficulty in identifying which specific foods were subject to the tax as a barrier to implementation.
 - It is unclear from the data if there was pressure from food manufacturers subject to the tax⁷⁸.
- One active fast food/convenience food tax law has been implemented by the Navajo Nation:
 - In 2014, the **Navajo Nation** passed the **Healthy Diné Nation Act** which combined an ad valorem uniform tax of 2% on foods of minimal-to-no-nutritional value with a waiver of a 5% sales tax on healthier foods and water⁷⁹.
 - Multiple criteria are used to define foods to be taxed including product categories, processing, and nutrients (levels of salt, saturated fat, and sugar).
 - This tax law the first of its kind in the US and any sovereign tribal nation⁸⁰.

Healthy Diné Nation Act (HDNA) impact and lessons learned

- **Revenue allocation:** the gross revenue of the Navajo Nation ad valorem uniform tax from 2015 to 2019 was \$7.58 million. HDNA tax revenues were assigned for disbursement directly to Navajo Nation communities⁸⁰. As with SSB taxes, using revenue to support community projects can increase the health impact of these taxes as well as alleviate concerns about their possible regressive consequences⁸¹.
- **Successful implementation in stores:** A study assessed the accuracy of the HDNA tax implementation in forty-seven stores within the Navajo Nation and found that the majority (87.2%) of stores accurately implemented the 2% tax on unhealthy items, while 55.3% of the stores accurately implemented the 6% tax waiver on healthy items⁷⁹.
- **Pricing and food availability in stores:** Measurements of changes in food pricing and availability in 71 stores in the Navajo Nation post-tax implementation (2013 to 2019) revealed that compared to neighbouring unsubsidized jurisdictions, Navajo convenience stores had greater availability of fresh vegetables and similar availability of fresh fruit⁷⁹.

Furthermore, following the tax implementation the average cost of fresh fruit decreased by 13% in Navajo stores, and increased by approximately 14.7% in neighbouring stores⁸²
⁸³.

3. Subsidies

- The US Department of Agriculture (USDA) administers fifteen nutrition assistance programmes designed to provide supplemental food and nutrition education to low-income Americans. **SNAP** is the largest and most researched federal nutrition programme^{84 85}.
 - SNAP was originally developed to reduce food insecurity, but focus has shifted to improving diet quality, and health outcomes such as obesity and associated NCDs⁸⁵.
 - SNAP supports forty million low-income Americans each month through a \$65 billion annual budget. It is administered by the USDA Food and Nutrition Service, with counties responsible for determining who meets the eligibility requirements and calculating/issuing monthly benefits. Eligible individuals receive benefits to buy food and/or beverages at over 240,000 authorized retailers, with few restrictions on purchases⁸⁴.

Impact and lessons learned

- **SNAP is economically responsive:** Evidence suggests SNAP results in increased economic activity and employment generation, with every \$1 billion in SNAP expenditures increasing GDP by \$1.79 billion and generating 8,900 -17,900 full-time equivalent jobs⁸⁴.
- **SNAP reduces food insecurity and supports individuals out of poverty:** SNAP participation is estimated to reduce household food insecurity by 30%. In 2017, the program helped lift 3.4 million people above the poverty line⁸⁴.
- **Sales of subsidised products:** A recent systematic review conducted by the WHO found that SNAP was associated with increased sales of subsidised fruits and vegetables⁸⁶. However, other studies have found SNAP authorised retailers offer comparatively fewer fresh fruits and vegetables, whole-grain foods, and low-fat dairy products in lower income communities than retailers in higher income communities.⁸⁷
- **SNAP participation has not changed overall dietary quality in the US:** Evidence suggests that SNAP participants are experiencing greater difficulty than non-participants to meet the national dietary guidelines. Some studies in a recent review found that children who received SNAP benefits consumed more SSBs, high-fat dairy, and processed meats than non-participants, and adults participating in SNAP had a higher prevalence of obesity than income-eligible non-participants^{84 88}.
- **Policy recommendations:** Research has highlighted several policy opportunities to strengthen the public health impacts of SNAP to address poor quality diets:
 - Make diet quality a healthy nutrition core SNAP objective and define and report on nutrition security⁸⁴.
 - Strengthen requirements for SNAP-authorized retailers to promote healthier retail food environments including prohibiting in-store marketing of unhealthy foods/beverages^{84 85}.
 - Pair incentives for purchasing fruits, vegetables, and other healthy foods with restrictions on unhealthy foods and beverages^{84 88}.

Appendix: Welsh Context

Overview

- Obesity is a major public health concern in Wales, with the prevalence increasing in adults and children, causing significant health impacts and associated healthcare costs⁸⁸.
- It is estimated that 61% of adults are living with overweight or obesity, and **26% of adults are living with obesity** in Wales⁸⁹, similar to the estimated UK wide prevalence of obesity among adults (26.8% in 2022⁹⁰) and higher than the OECD adult average⁷ (18% in 2021)⁹¹.
- Men are more likely to be living with overweight or obesity than women (65% versus 57%), but the prevalence of obesity is higher in women than men (27% versus 25%)⁹².
- Middle-aged adults (aged 45-64 years) are more likely to be living with obesity (31%) compared to those aged 16-44 years (25%) and those aged 65+ (21%)⁹³.
- It is estimated that **11.4% of children aged 4-5 years are living with obesity**⁹³, higher than the 9.2% reported in England (2022/2023)⁹⁴. A further 13.4% of children aged 4-5 years are overweight in Wales, higher than UK wide prevalence of 11.3% (weight-for-height, 2022)⁹⁵.
- Obesity rates are much higher in the most disadvantaged communities. Rates of adult overweight and obesity range from 52% in Powys to 78% in Blaenau Gwent (where 37% of adults reported being obese)⁹⁶. A study of the prevalence of severe obesity in children also found a strong link between severe obesity in children and socioeconomic deprivation in Wales⁹⁷.

Fiscal lever mechanisms

- Current dietary-related fiscal measures implemented at a UK level include the Soft Drinks Industry Levy and the Healthy Start Scheme.
- Debate around fiscal policies has been charged in the UK but interest in taking a more robust approach has been growing² following the introduction of the Soft Drinks Industry Levy (SDIL) and proposals to introduce a salt and sugar reformulation tax made in the National Food Strategy (2021⁹⁸) and the House of Lords Food, Diet and Obesity Committee report 'Recipe for health: A plan to fix our broken food system' (2024⁹⁹).

1. Soft Drinks Industry Levy (SDIL)

- In 2016, the UK introduced a two-tiered specific excise tax on soft drinks the Soft Drinks Industry Levy (SDIL) targeting producers of soft drinks with added sugar to reformulate their products to reduce the sugar content, and reduce portion sizes for drinks with added sugar¹⁰⁰:
 - Beverages with 8g or more of sugar per 100ml are taxed at £0.24/L (US\$ 0.33/L),
 - Beverages with 5–8g of sugar per 100ml are taxed at £0.18/L (US\$ 0.25/L),
 - Beverages with less than 5g sugar per 100ml are not taxed.
- The levy has resulted in reductions of 46% in the average sugar content of affected products from 2015 to 2020, with decreases similar across all socioeconomic groups (reductions of between 44% to 47%)¹⁰¹.
- The levy also resulted in a large shift in sales towards lower sugar products not eligible for the levy².
- Additionally, there is evidence the levy incentivized manufacturers to reformulate their products, with the proportion of SSBs over the lower levy sugar threshold falling by 34% between 2015 and 2019¹.
- Modelling by Rogers et al. (2023)¹⁰² assessed the impact of the SDIL on obesity, reporting it was associated with an 8% relative reduction in obesity levels in year six girls in England,

⁷ Caution is needed when comparing height and weight measurements across countries. In Wales height and weight measurements are self-reported in the National Survey of Wales/Welsh Health Survey in contrast to equivalent statistics in Scotland, England, and Northern Ireland where direct measurements are taken⁶.

with the greatest differences in those living in deprived areas. However, there was no overall change in obesity prevalence in year 6 boys.

- The recently published House of Lords Food, Diet and Obesity Committee report has called for the government to include sugary milk-based drinks in the UK levy, as well as to reduce the current thresholds for the levy from 5g and 8g per 100ml to 4g and 7g per 100ml, with a consultation announced¹⁰³.

2. The Healthy Start scheme

- In the UK, the Healthy Start Scheme aims to improve the health of low-income pregnant women and families with young children receiving benefits and tax credits by distributing vouchers for healthy foods such as fruit, vegetables, and cow's milk².
- The scheme is available in Wales, England, and Northern Ireland, with Scotland having a similar scheme called Best Start Foods¹⁰⁴.
- Evidence suggests the scheme is effective in increasing spending on fruit and vegetables and improving the nutritional content of households' shopping baskets¹⁰⁵.
- The House of Lords Food, Diet and Obesity Committee has called for the government to increase the value of Healthy Start payments to reflect increases in the prices of fruit, vegetables, and milk, and to consider extending eligibility for the scheme to all families earning under £20,000 per year⁷.

The International Horizon Scanning and Learning reports are developed by the International Health Team / the International Health Coordination Centre (IHCC) at the Policy and International Health WHO Collaborating Centre on Investment for Health and Well-being (PIH WHO CC), Public Health Wales.

National Director of Policy and International Health, PIH WHO CC: Sumina Azam
Head of International Health and PIH WHO CC Deputy Director: Mariana Dyakova

Authors and contributors^a: Keira Charteris, Ilona Johnson, Mariana Dyakova, Zuwaira Hashim, Morgan Savoury, Anna Howells, Josh Levett, Leonor Gonzalez de Mendoza Cremades, Sumina Azam.

Special thanks to Emily Finney^b for their contribution.

a Public Health Wales

b Welsh Government

Contacts: Keira.Charteris@wales.nhs.uk; Mariana.Dyakova@wales.nhs.uk

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