Fiscal Policies for Diet and Prevention of Noncommunicable Diseases

Technical Meeting Report

5–6 May 2015, Geneva, Switzerland

TOGETHER
LET'S BEAT NCDs
#beatNCDs

World Health Organization

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Abbreviations

CN	Combined nomenclature
DALY	Disability-adjusted life year
DKr	Danish krone
EU	European Union
FINI	Food Insecurity and Nutrition Incentives
GAP	Global Action Plan on Noncommunicable Diseases
HIP	Health Incentive Pilot
ICN2	2nd International Conference on Nutrition
MRA	Mauritius Revenue Authority
NCD	Noncommunicable disease
OECD	Organisation for Economic Co-operation and Development
PAHO	Pan American Health Organization
PHPT	Public health product tax
SNAP	Supplemental Nutrition Assistance Programme
SSB	Sugar-sweetened beverage
USA	United States of America
VAT	Value added tax
WHO	World Health Organization

Glossary

Ad valorem tax:
Method for charging a duty, fee, or tax according to the value of goods and services, instead of by a fixed rate, or by weight or quantity.

Fiscal policy:
A government's revenue (taxation) and spending policy. This report focuses on non-trade related taxes and subsidies related to food, as non-discriminatory fiscal policy approaches.

Noncommunicable diseases:
Noncommunicable diseases (NCDs) – also known as chronic diseases – are not passed from person to person. They are of long duration and, generally, slow progression. The four main types of NCDs are: cardiovascular diseases (such as heart attacks and stroke); cancers; chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma); and diabetes.

Non-sugar sweetener:
A food additive (other than a mono- or disaccharide sugar), which imparts a sweet taste to a food. Technological purposes for this functional class includes: sweetener, intense sweetener, bulk sweetener. It should be noted that products like sugars, honey and other food ingredients that can be used to sweeten are not associated with the term "sweetener".

Nutrient profiling:
The science of classifying or ranking foods according to their nutritional composition for reasons related to preventing disease and promoting health.

Price elasticity of demand:
The degree to which demand for a good or service varies with its price.

Regressivity:
The extent to which the burden of a tax is higher for people on lower incomes, and/or represents a smaller percentage of a higher income earner.

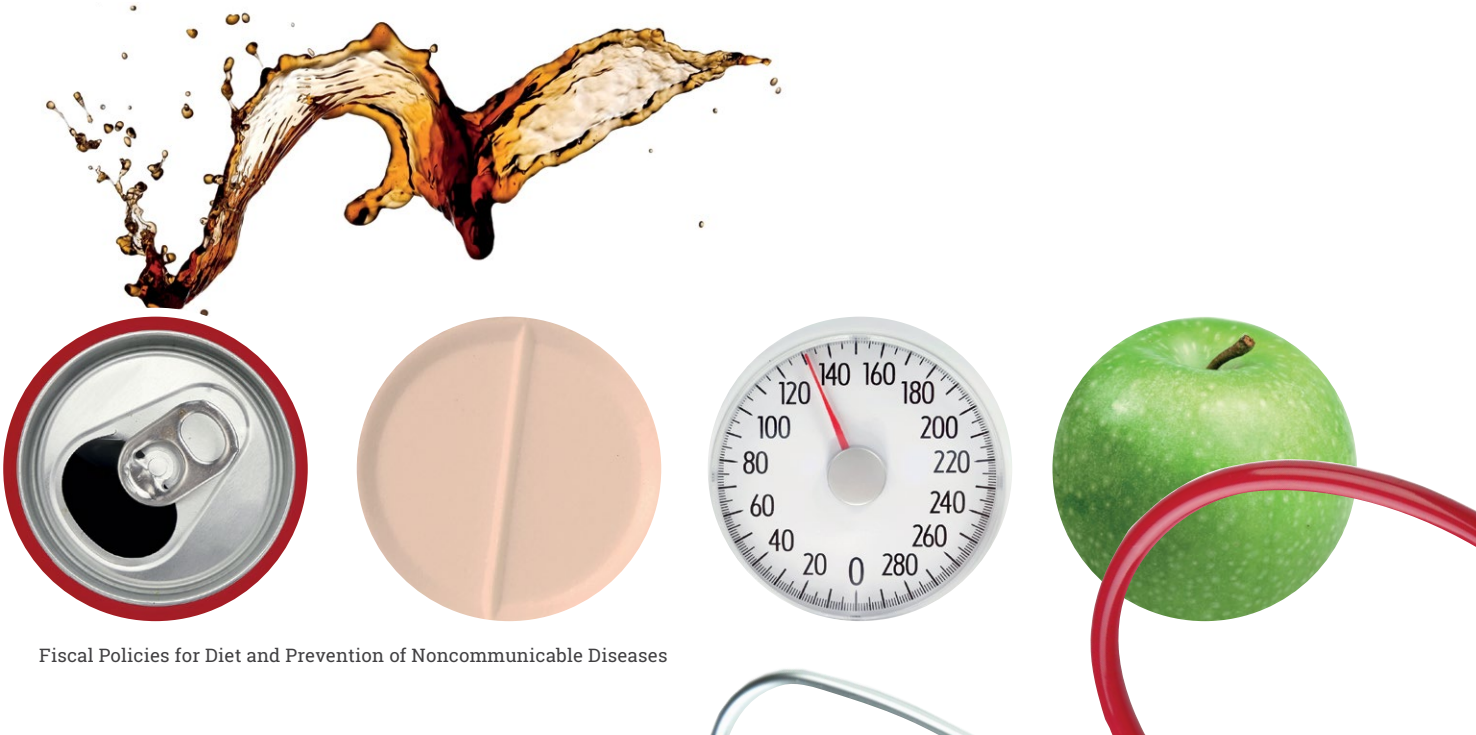
Specific excise:
A set amount of tax charged on a given amount of product.

Substitution:
An effect caused by a rise in price that induces a consumer (whose income has remained the same) to buy more of a relatively lower-priced good and less of a higher-priced one.

Sugar-sweetened beverages:
Sugar-sweetened beverages (SSBs) are beverages containing added caloric sweeteners, such as sucrose, high-fructose corn syrup, or fruit-juice concentrates. These include, but are not limited to, carbonates, fruit drinks, sports drinks, energy and vitamin water drinks, sweetened iced tea, and lemonade.

Value-added tax:
Tax on each stage of production that adds value to a product or process.

Sources: World Health Organization (www.who.int); Online Business Dictionary (www.businessdictionary.com);
Using price policies to promote healthier diets. Copenhagen: WHO Regional Office for Europe; 2015.



Executive summary

The Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020 proposes that *"as appropriate to national context, countries consider the use of economic tools that are justified by evidence, and may include taxes and subsidies, to improve access to healthy dietary choices and create incentives for behaviours associated with improved health outcomes and discourage the consumption of less healthy options".* The Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition 2012 also considers that *"trade measures, taxes and subsidies are an important means of guaranteeing access and enabling healthy dietary choices".*

To address the increasing number of requests from Member States for guidance on how to design fiscal policies on diet, WHO convened a technical meeting of global experts in fiscal policies on 5–6 May 2015 in Geneva. The main objectives of the meeting were to review evidence and existing guidance, discuss country case studies and provide considerations with regards to the scope, design and implementation of effective fiscal policies on diet. The meeting consisted of presentations and discussions during plenary and in working groups on the evidence, country experiences and technical aspects of policy design and implementation.

It was concluded that there is reasonable and increasing evidence that appropriately designed taxes on sugar-sweetened beverages would result in proportional reductions in consumption, especially if aimed at raising the retail price by 20% or more. There is similar strong evidence that subsidies for fresh fruits and vegetables that reduce prices by 10–30% are effective in increasing fruit and vegetable consumption. Greater effects on the net energy intake and weight may be accomplished by combining subsidies on fruit and vegetables and taxation of target foods and beverages. Vulnerable populations, including low-income consumers, are most price-responsive and, in terms of health, benefit most from changes in the relative prices of foods and beverages.

Consistent with the evidence on tobacco taxes, specific excise taxes – as opposed to sales or other taxes – based on a percentage of retail price, are likely to be most effective. In countries with strong tax administration, taxes that are calculated based on nutrient content can have greater impact. A proper situation analysis, good political advocacy, appropriate objective setting and evaluation, should be part of the multidisciplinary development and implementation of such policies. It is also important in this process to be proactive in counteracting the industry arguments and efforts to oppose the development and implementation of tax measures or attenuate their effects.

There are evidence gaps that could be addressed, with more countries developing and implementing such fiscal policies. Lack of standards or criteria for determining exactly what to tax is a challenge experienced by countries and the development of a nutrient profile model for designing and implementing fiscal policies was recommended. In addition, there was a call for a manual on developing and implementing fiscal policies for diet.

1. Introduction

The Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020 (GAP) *(1)* provides a roadmap and a menu of policy options for Member States and other stakeholders to take coordinated and coherent action to reduce mortality from noncommunicable diseases (NCDs) and exposure to risk factors. Under Objective 3 of GAP, one of the policy options is to *"consider economic tools that are justified by evidence, and may include taxes and subsidies, that create incentives for behaviours associated with improved health outcomes, improve the affordability and encourage consumption of healthier food products and discourage the consumption of less healthy options".*

Furthermore, the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition 2012 *(2)* states under Action 3: *"Trade measures, taxes and subsidies are an important means of guaranteeing access and enabling healthy dietary choices. They can be powerful tools when associated with adequate information for consumers through nutrition labelling and responsible food marketing, and with social marketing and promotion of healthy diets and healthy lifestyles".* In November 2014, during the Second International Conference on Nutrition (ICN2), Member States adopted the Rome Declaration *(3)* and a Framework for Action *(4)* which called governments and partners to *"identify opportunities to achieve global food and nutrition targets, through trade and investment policies".*

As part of these global mandates to prevent NCDs, improve nutrition, and address the increasing demand from Member States for guidance on how to design fiscal policies on diet, WHO organized an expert technical meeting on 5–6 May 2015 in Geneva.

The specific objectives of the meeting were to:

- Review existing evidence of taxes on sugar-sweetened beverages (SSBs) and other foods and beverages high in sugar, salt and fat, including the health and economic impact;
- Present and review evidence from countries with experience in the taxing of SSBs and other foods and beverages high in sugar, salt and fat;
- Review and discuss modalities on policy options of taxes on SSBs and other foods and beverages high in sugar, salt and fat, including scope, tax rate, tax base and use of tax revenue.

The expected output of the technical meeting was to provide considerations based on evidence with regards to the scope, design and implementation of effective fiscal policies on sugar-sweetened beverages and other foods and beverages high in saturated fats, trans-fatty acids, free sugars and/or salt. The meeting convened global experts in public health or health economics with experience in fiscal policies for health, particularly in relation to diet and tobacco. These included country experts, a politician, academic researchers, and civil society organization representatives. The WHO Secretariat consisted of staff from the departments of Nutrition for Health and Development and of Prevention of Noncommunicable Diseases.

Dr Oleg Chestnov, Assistant Director-General Noncommunicable Diseases and Mental Health welcomed the participants and opened the meeting by describing it as another milestone in the work on NCD prevention. Dr Sirpa Sarlio-Lähteenkorva, Senior Adviser of the Ministry of Social Affairs and Health of Finland, and Dr Franco Sassi, Senior Health Economist of the Organisation for Economic Co-operation and Development (OECD), were elected as co-chairs, and Professor Jamie Chriqui of the University of Illinois at Chicago as rapporteur. A full list of participants can be found in Annex 1.

The meeting consisted of panel presentations and discussions on the evidence of fiscal policies, country experiences and technical aspects of policy design and implementation. Two working groups discussed opportunities and challenges for fiscal policies and aspects of good fiscal policy design, particularly with respect to target foods, type of tax, tax structure, price elasticity, substitution effects and implications for revenue generations. This was followed by a plenary discussion to reach consensus on the conclusions and recommendations. The meeting programme can be found in Annex 2.

2. Overview of noncommunicable diseases and the role of fiscal policies to promote healthy diets

Noncommunicable diseases, including diabetes and obesity, are a major challenge for health and development, particularly in developing countries, where 85% of premature deaths occur. The 2013 World Health Assembly endorsed the Global Action Plan on Noncommunicable Diseases 2013–2020 *(1)* which includes a set of actions for Member States, international partners and the WHO Secretariat to prevent NCDs, promote healthy diets and physical activity, and to attain the nine voluntary global NCD targets by 2025. The nine targets include halting the rise in diabetes and obesity in adults and adolescents as well as the increase of childhood overweight and obesity by 2025.

In 2014, 39% of adults worldwide aged 18 years and older (38% of men and 40% of women) were overweight (defined as body mass index [BMI] ≥ 25). Between 1980 and 2014, the worldwide prevalence of obesity nearly doubled, with 11% of men and 15% of women – i.e. more than half a billion adults – being classified as obese. In 2013, an estimated 42 million children aged under 5 years (6.3%) were overweight, an increase from around 5% in 2000 to 6% in 2010 and 6.3% in 2013,with the highest rates of increase being observed in Africa and Asia. Diabetes was directly responsible for 1.5 million deaths in 2012 and 89 million DALYs. The global prevalence of diabetes (defined as a fasting plasma glucose value ≥7.0 mmol/L [126 mg/dl] or being on medication for raised blood glucose) was estimated to be 9% in 2014 *(5)*. Excess consumption of calorie-dense foods containing high levels of saturated fats, trans-fatty acids, free sugars and/or salt either alone, or in combination with insufficient physical activity, contribute to obesity and diabetes, as well as other NCDs. National dietary surveys indicate that foods and beverages high in free sugars can be a major source of discretionary calories in the diet, particularly in the case of children, adolescents and young adults.

Fiscal policies to improve diet – particularly taxation and subsidies – are key population-based policy interventions to reduce the consumption of calorie-dense foods and address obesity and diabetes. They form part of the menu of policy options of GAP and are being considered by an increasing number of countries to promote healthy diets, especially after experiencing progress in implementing tobacco taxation. There is increasingly clear evidence that taxes and subsidies influence purchasing behaviour, notably when applied to sugar-sweetened beverages and this contributes significantly towards addressing the obesity and diabetes epidemic, especially when part of comprehensive multisectoral population-based interventions.

3. Rationale and evidence of fiscal policies

Rationale for fiscal policies on diet

There are strong economic and health rationales for using fiscal tools: fiscal interventions play a key role in correcting for market failure; they can create incentives to reduce dietary risk factors for NCDs and generate revenues for the government. Estimates from recent economic research show that the prices of foods and beverages effect purchase and consumption significantly. Fiscal policy intervention has been proposed primarily as a mechanism to influence consumer behaviour at the point of purchase. By incentivising consumers to purchase healthier foods (or disincentivising the purchase of less healthy foods), fiscal interventions aim to change consumption of these foods at the individual and household level, and to thus reduce diet-related risk factors for NCDs (Figure 1).

Fiscal policy interventions can also work through changing incentives for the production and manufacture of healthy, relative to less healthy, foods. As taxes increase, the purchase price of certain foods increases and consumers thus reduce their purchases. As a consequence, industry may produce less of the food in question. Similarly, a subsidy decreases the cost for consumers and can lead to increased consumption, thus triggering increases in supply to meet the rising demand. Taxes and subsidies can also incentivise the food industry to reformulate foods to improve the nutritional quality of their products.

An additional benefit of fiscal policy interventions, highlighted in the literature, is revenue generation and the potential to designate (hypothecate) these funds for health promoting purposes.

As such, the use of fiscal policies should be considered a key component of a comprehensive strategy for the promotion of healthy diet and the prevention and control of NCDs.

The main fiscal policy interventions that have been proposed for NCD prevention are: taxes on SSBs, unhealthy nutrients (saturated/trans fats, salt and sugar) and/or unhealthy foods (defined through nutrient profiling); and subsidies on fruits, vegetables and/or other healthy foods.

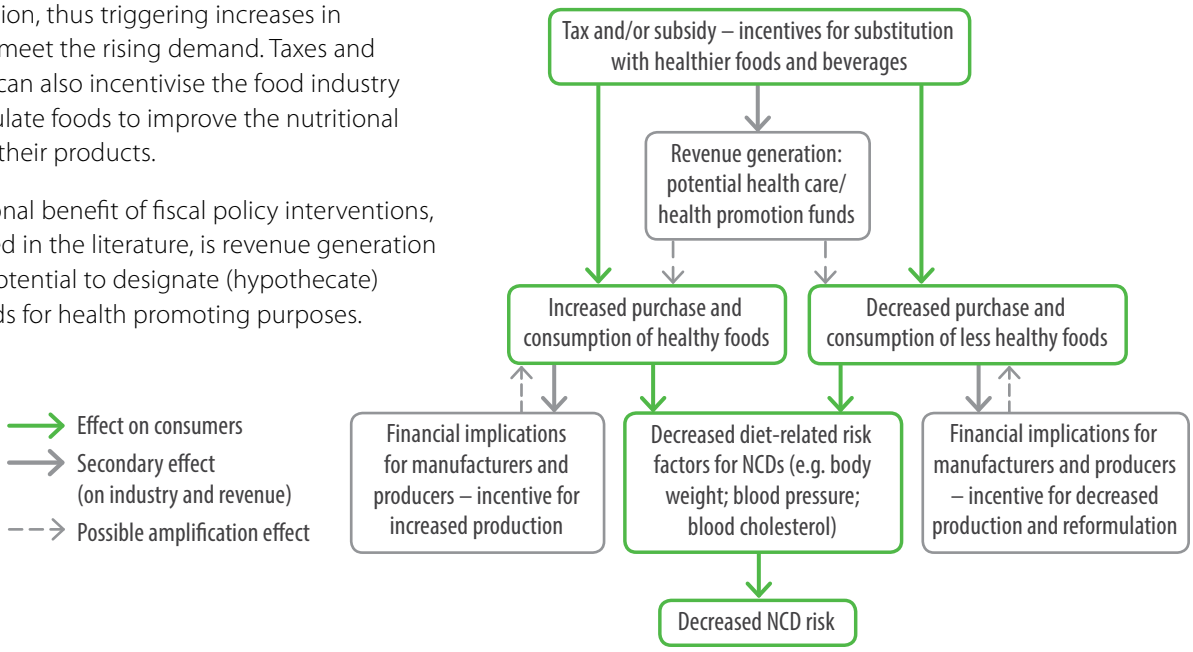
The fundamentals to the effect of fiscal policies on diet and the basics of price elasticities include:

a) demand for SSBs is generally elastic, with price elasticities around -0.9 to -1.3;

b) price elasticity is higher among low-income consumers, in younger people and people with overweight, which is correlated with income;

c) high consumers of SSBs are also likely to be more price-responsive.

Figure 1: ***Pathways for the effect of fiscal policy interventions***



Source: Fiscal policy options with potential for improving diets for the prevention of noncommunicable diseases (NCDs) (draft). Geneva: World Health Organization; 2015.

Existing evidence on fiscal policies for diet

Growing evidence shows that appropriately designed fiscal policies, when implemented with other policy actions, have considerable potential for promoting healthier diets. These will improve weight outcomes and other diet-related risk factors, and will contribute, ultimately, both to the prevention of NCDs and to the reduction of the NCD health and economic burden.

A meta-review of 11 recent systematic reviews on the effectiveness of fiscal policy interventions for improving diets and preventing NCDs *(6)* showed that the evidence was strongest and most consistent for the effectiveness of SSB taxes in the range of 20–50% in reducing consumption, and of fruit and vegetable subsidies in the range of 10–30% in increasing consumption. While evidence is mixed on the net effect of fruit and vegetable subsidies on net caloric intake and weight, overall diet quality improves thus leading to improvements in health outcomes. There is also growing evidence for the likely effectiveness of combinations of taxes and subsidies, particularly as a mechanism to reduce potential substitution with unhealthy foods. These combination interventions can be designed using modelling that is both effective and revenue neutral. All the reviews concluded that taxes and subsidies were effective at changing the consumption and purchasing of target foods, with the strongest and most consistent effects seen for SSB taxes and fruit and vegetable subsidies (Figure 2). The greatest impact was on lower-income, less-educated younger populations, and populations at greater risk of obesity.

Figure 2: ***Summary of main findings of meta-review of systematic reviews on fiscal policies on diet***

	Food/ beverage taxes	Nutrient-focused taxes	Subsidies
Effect on consumption	Strongest evidence for SSB taxes – reduce consumption by same percentage as tax rate.	Reduce consumption of target but may increase consumption of non-target nutritients; may apply to core foods; better if paired with subsidy.	Subsidies increase healthy food intake. Strongest evidence for fruit and vegetable subsidies.
Effects on body weight/disease outcomes	Substitution will affect total calorie intake. Most effective to target sugar-sweetened beverages. Limited evidence for disease outcomes.	Disease outcome affected by substitution – nutrient profile taxes less likely to have unintented effects than single nutrient-based taxes.	Subsidies may also increase total calorie intake and body weight. Very likely to reduce dietary NCD risk factors.
Differential effects	May be most effective for low-income populations; may have greater effect on those who consume most.	May be more likely to have regressive effects as more likely to apply to core foods.	Mixed socioeconomic status effects for population subsidies, may benefit wealthy. Targeted low-income subsidies effective.

Source: Fiscal policy options with potential for improving diets for the prevention of noncommunicable diseases (NCDs) (draft). Geneva: World Health Organization; 2015.

Current evidence is based mainly on intervention studies and modelling. The most accurate and effective objectives for price policies focus on their upstream potential to influence purchasing and consumption behaviour, rather than on downstream effects, such as body weight or disease which are also influenced by a large number of other factors. One of the evidence gaps that needs to be filled is research quantifying the impact of SSB tax on improving weight outcomes and other diet-related risk factors. In many of the countries implementing fiscal policies formal evaluations are lacking, and when more countries introduce similar measures, longitudinal research work could be one way to address this evidence gap. Monitoring and evaluation efforts are critical in documenting the effectiveness of the taxes in achieving their objectives in terms of revenue and its use, impact on purchase patterns, consumption, and product composition for targeted products and close substitutes. In addition, monitoring and evaluation highlight the relevant health outcomes of tax implementation, while identifying unanticipated effects - such as a substitution to non-sugar sweeteners.

4. Country experiences and lessons learned

There were important insights from each of the country presentations: Denmark, Ecuador, Egypt, Finland, France, Hungary, Mauritius, Mexico, Philippines, Thailand and the United States of America. Fiscal measures – in particular food taxation – are being implemented with promising results; however, the objectives of many countries focus more on economical benefits rather than on public health. Some of the challenges faced in implementation include a lack of appropriate capacity for tax administration, tax set at low levels that prove inefficient in influencing behavioural choices, and a lack of monitoring and evaluation of the health impact. It was established from all presentations that countries attempting to progress fiscal policies face considerable political and industry opposition.

Denmark

Denmark's tax on saturated fat – implemented on 1 October 2011 and abolished on 1 January 2013 – proved to be efficient in reducing the intake of saturated fat as well as in improving other dietary measures and reducing mortality from NCDs. The tax was paid on the weight of saturated fat in foods and on saturated fat used for the production of foods when the content of saturated fat exceeded 2.3 g/100 g. The excise tax amounted to DKr 16.00 (€2.15) per kilogram of saturated fat, plus an additional 25% VAT.

Weaknesses in design, the lack of a coordinated voice from public health organizations and a lack of public documentation of the aggregated effects on health and the overall effects on the economy, gave opponents of the tax – for example the food industry and trade organizations – free play to create negative publicity and to initiate EU jurisdictional actions against it *(7–14)*.

The lessons learned from Denmark are that:

- potential health effects should be estimated before implementation of a tax, and real health and consumption effects measured and documented after. These would include the measuring of potential and adverse substitution effects;
- health professionals and organizations should be consulted during the design of the tax to ensure a coordinated voice;
- total welfare effects on the economy should be analysed and discussed;
- anti-competitiveness of a tax should be analysed before implementation to avoid lawsuits; and
- the design of a tax should be clear and logical and based on clear public health rationale.

Ecuador

In light of the dramatic increases in overweight and obesity rates across the Ecuadorian population *(15)*, the government has implemented interventions in the field of food regulation. Ecuador is the first country in Latin America to implement a traffic light front-of-pack food labelling. This regulation went into effect officially on 29 August 2014 *(16)*.

The Ecuadorian government made the political decision to levy a tax on sugar-sweetened beverages and foods high in fat, sugar and salt ("junk food"). However, the technical aspect of this proposal faced challenges which made the tax difficult to implement – the main challenge being a lack of standard criteria for determining what food products to tax based on nutrient content. Also, as this was a public announcement, the national media distorted the information, stating that certain traditional preparations consumed in Ecuador would be considered as junk food because of their high fat content. In order to clarify the difference, the energy density criteria *(17)* were used as well as definitions developed by the University of Sao Paulo research group. Nevertheless, application of these criteria was not considered feasible *(18)*.

Egypt

Egypt applies a sales tax on industrial goods with a general rate of 10%, and specific rates for some goods (excise tax). The government imposed reduced tax rates, or exemptions, for specific goods, the purchase of which they considered essential or desirable. This was put in place without consideration of the resulting negative health effects this may have on the consumer, such as with sugar and hydrogenated oils.

To date, the government of Egypt has not adopted taxes on unhealthy food as a tool to reduce its consumption. On the contrary, it has imposed low tax rates on some unhealthy foods, such as sugar, which has tax rates less than 60 Egyptian pounds per ton. With certain products, the government has reduced tax rates due to manufacturers pressure, as, for example, with carbonated beverages where the excise tax rate was changed from a two-tiered rate (50% and 60% of the producer price) into a single sales tax of 25%.

Finland

Finland has a long history of using price policies to influence food consumption. Since 1948, free school meals, paid by tax income, have been offered to all pupils at elementary schools *(19)* and university students have benefitted from subsidized meals if nutritional quality criteria are met *(20)*. Moreover, since 2009, EU school milk subsidies have not been given to products high in fat or salt. Since 2011, excise duties have been levied on sweets, chocolate and non alcoholic beverages (Act 1127/2010). The taxes are primarily levied to generate revenue for government finance purposes, but potential health and consumption impacts are acknowledged. The tax rates were increased in 2012 and 2014.

The current excise tax is €0.95 per kilogram for sweets and ice cream. For non-alcoholic beverages the tax is €0.11 per litre; however, beverages containing more than 0.5% sugar pay €0.22 per litre. Products are identified by CN/Custom tariff headings and small-scale production and exported products are exempted *(21)*.[1]

From 2010 to 2013, a Sugar Tax Working Group, set up by the Ministry of Finance, assessed the suitability and impact of three tax models: 1) a tax model based on sugar content; 2) a tax model similar to existing excise duty on sweets; and 3) a tax model combining the two. The Working Group found that the combination model would be optimal in terms of health promotion, while the excise duty model would be the most straightforward in terms of practical implementation. Both the sugar tax and the combination model would impose a significant administrative burden on taxpayers falling within the sphere of the tax *(22)*.

The impact of the tax on purchase, consumption and health has not been formally evaluated; however according to unofficial reports it has led to decreased sales and consumption of non alcoholic beverages and sweets. At the same time, there have been concerns raised by the industry that a tax targeting such specific products is unfairly discriminating against particular manufacturers in the food industry, and therefore distorting competition.

France

In 2011, France adopted a levy on beverages and liquid preparations for human consumption that contained added sugar or other sweeteners. The amount of the contribution was set at €7.16 per hectolitre, and was increased to €7.5 per hectolitre in 2015. Since 2013, the total of the contribution is allocated to the National Social Health Insurance.

According to the Nutrinet[2] study for the General Directorate of Health of 2013, consumption of sodas has decreased, particularly in young people, low-income groups and households with adolescents. There is a need for more detailed impact assessments and effects on children, different socioeconomic groups and on substitution.

In 2014, the revenue raised by tax was approximately €300 million. The tax has appeared to have a positive effect on purchase patterns from a public health perspective and is generally well accepted by the population.

Hungary

A public health product tax (PHPT) was introduced in 2011 taxing non-staple food products that carry proven health risks when consumed. The objectives of the PHPT were: to encourage healthier eating habits by increasing the availability of healthy choices; to encourage reformulation; and to increase revenues for public health. The PHPT is a specific excise tax on a per unit measure, based on sugar, salt and methylxantine content in pre-packaged food products. The tax-related administrative burden for enterprises is minimal.

The first impact assessment, conducted one year later, found that 26–32% of consumers had decreased their intake of products subject to PHPT. Price increase was the major driving force, although a high percentage of consumers (22–38%, depending on food categories) had reduced their intake due to an increased health consciousness. Consumers with bad self perceived health status were, on average, twice as likely to decrease consumption of foods subject to PHPT compared with those of good health. Moreover, of the responding food producers, 40% had carried out reformulation of their products, 30% had totally removed unfavourable

[1] *On 29 September 2015, a Finnish Financial Parliamentary Committee decided to end the tax on sweets that has been in force since 2011. www.loc.gov/law/foreign-news/article/finland-tax-on-chocolate-and-sweets-to-be-eliminated-2017*

[2] *https://www.etude-nutrinet-sante.fr/fr/common/login.aspx*

components in their products, and 70% had decreased the quantity of unfavourable components in their products *(23)*.

In conclusion, PHPT has achieved its public health aims. The population has reduced its consumption of products subject to PHPT; food manufacturers have started reformulation, and the estimated tax revenue has been almost fully realized.

The second impact assessment of 2014 sought to determine whether changes in consumption would be maintained in the long term and how they would be influenced by nutritional and socioeconomic status. The assessment also aimed to obtain information on product substitution. Initial results showed that consumers of unhealthy food products responded to the tax by: a) choosing a cheaper, often healthier product (7–16% of those surveyed); b) consumed less of the unhealthy product (5–16%); or c) changed to another brand of the product (5–11%) or substituted some other food (often a healthier alternative). Most people (59–73%) who reduced their consumption after introduction of the tax, consumed less in 2014 than in previous years, suggesting that the reduction in unhealthy food consumption has been sustained.

Mauritius

Mauritius is a sugar producing country. The share of sugar production in the Mauritian economy has consequently declined over the years and in relative terms dwindled to about 3.5% of the gross domestic product in 2003 (from 25% in the 1970s). Sugar production nevertheless remains an important contributor to the country's economy, with sugar exports representing approximately 19% of foreign exchange earnings.

Irrespective of the significance of sugar to the economy, in February 2013, the government took the decision to introduce an excise duty on the sugar content of "soft drinks". "Soft drinks" subject to tax in Mauritius include: any aerated beverage (such as colas); any syrup for dilution; and any fruit squash, cordial or fruit drink (including blends and juice with added sugar). The excise duty excludes bottled water; pure fruit juice, and blends thereof; pure vegetable juice, and blends thereof; and dairy milk, and products thereof.

The rate of the excise duty was set at 2 Mauritian cents per gram of sugar. This was increased to 3 cents per gram from 1 January 2014.

For imported products, the tax is collected by the Mauritius Revenue Authority (MRA) (Mauritian customs) at the time the product is being cleared from customs. For locally produced products, the tax is collected by the MRA at the time the product leaves the factory. The importer, or the local manufacturer, has to produce a certificate from an accredited laboratory, or the Mauritius Standard Bureau, indicating the sugar content for customs clearance. In addition, the MRA also carries out post-control audit checks on a risk management basis.

The excise duty collected is 330 million Mauritian rupees (US$ 9.2 million). Its impact on the sale of soft drinks has not been assessed.

Mexico

The prevalence of overweight and obesity reached 71% among adults and 30% in children and adolescents in Mexico *(24, 25)*. The proportion of adults with diabetes was estimated at 14% in 2006 *(26)*. In 2012, Mexico had the highest worldwide consumption of sugar-sweetened beverages: 160 litres per capita *(27)*. In addition, recent evidence shows that 71% of the consumption of added sugars comes from SSBs and 23% from non-basic energy dense foods *(28)*.

In this context, on January 2014 Mexico implemented two taxes: 1) a 1 peso per litre excise tax on any non-alcoholic beverage with added sugar (powder, concentrates or ready-to-drink), which is paid by the producer and represents about a 10% increase in price; and, 2) an 8% ad valorem tax on the purchase price for a list of non-essential energy-dense foods (snacks, confectionery products, chocolate and other products derived from cacao, puddings, flans, ice cream, candies, peanut butter), that contain 275 calories per 100 grams or more. This tax is paid by the producer or the retailer.

The SSB tax was proposed by the government to the congress as a means of reducing the negative effects of SSB consumption on overweight and obesity, and the direct and indirect associated costs. Factors that enabled the approval and implementation of the tax were: evidence provided by experts on nutrition; high obesity and diabetes rates; high consumption of SSBs and non essential high energy dense foods; economics (price elasticities overall and by income level, potential substitutes, revenue estimation); the active presence of the civil society (advocacy, campaigns, mapping key supporters of the initiative); and interest from the government.

After implementation of the tax, studies have been conducted to evaluate the effects on consumer prices and purchases. Preliminary results show a complete pass through to consumer prices for SSBs in urban areas, but incomplete for rural areas and heterogeneous for the

non essential high-energy dense foods *(29)*. Preliminary results also show that household purchases have decreased during 2014 *(30)*.

A study by the Mexican Public Health Institute and University of North Carolina on the impact of first year of introduction of the excise tax on sugar-sweetened beverages in Mexico concluded that *"relative to the counterfactual in 2014, purchases of taxed beverages decreased by an average of 6%, and decreased at an increasing rate up to a 12% decline by December 2014. All three socioeconomic groups reduced purchases of taxed beverages, but reductions were higher among the households of low socioeconomic status, averaging a 9% decline during 2014, and up to a 17% decrease by December 2014 compared with pre-tax trends" (31, 32)*.

Philippines

In 2009, the Philippines ranked 11th worldwide in the consumption of soft drinks (about 1.6 billion litres) which prompted a lawmaker and health initiatives advocate in congress to initiate and file a bill imposing an excise tax on sugar-sweetened beverages to help curb its consumption and lower the risk of obesity, diabetes and related illnesses. At the same time, the bill was to generate tax revenues that would be allocated towards government health initiatives. These included: providing medicines and medical assistance for the indigenous diabetic patients; the promotion of community-based obesity prevention programmes; diabetes prevention campaigns and other diet-related health awareness programmes; funding for research and other development programmes related to food and nutrition; providing access to potable water; and establishing sports facilities in communities and public schools to promote health and wellness.

The aim of curbing SSBs consumption is supported by a study *(33)* that shows that imposing a tax that would increase the price of SSBs by 20% would reduce overall consumption by 24%. The filing of the bill in October 2013 sparked negative reactions, not only from the beverage and sugar industries, but also from some government agencies and political figures directly impacted.

Although there is influence from stakeholders in deterring the bill within congress, there remains great optimism that, with the strong support received from various Philippine and international health organizations and agencies – including the World Health Organization – it will be progressed with a positive outcome.

Thailand

Economic growth in Thailand has led to higher incomes and an increase in consumption of SSBs as Thailand becomes an emerging market for many ready-to-drink beverages. Existing taxation is ad valorem and does not consider the health promotion value. The current tax of beverages without sugar is US$ 0.025/440 ml, while the tax on beverages with sugar is US$ 0.012/440 ml.

The food system in Thailand includes many different food items, manufacturers and sellers. Tax increases do not always translate into higher prices. Compared with high-income countries, Thailand has a smaller proportion of commercial processed foods and beverages, cheaper retail prices of SSBs and relatively high prices of fast food. Healthy alternatives are not always available.

Fiscal policy development and implementation is difficult due to the many competing policy priorities and an increasing influence of international trade treaties on policies. Human resources for stewardship and implementation are limited and are coupled with a lack of verification mechanisms, particularly on food composition and retail prices. There is also insufficient monitoring and enforcement capacity and limited preparedness of local governments to administer tax policies.

United States of America: California and Vermont

In the USA, the state of California has been a leader in establishing public policies to regulate the sale of soda and other sugar-sweetened beverages. State legislation to ban the sale of SSBs on school campuses was first introduced in 1999, and was fully enacted by 2005. Since 2002, California has considered establishing a tax on SSBs five times. In 2012, two cities in California – Richmond and El Monte – voted to tax SSBs; however, the two-thirds threshold for success was not achieved. In 2014, two further Californian cities – Berkeley and San Francisco – similarly voted for an SSB tax. Berkeley achieved a 75% vote for implementation, well above the 50% threshold for success and thus became the first USA city to pass a tax measure, imposing a 1 cent per ounce tax on SSBs. In 2014, California was the first state in the USA to consider legislation to require warning labels on SSBs.

There was much opposition to these two legislations and two fundamental lessons emerged from the political campaigns. The first was that, using the same well-financed scare tactics made famous by the tobacco industry, the beverage industry, similarly, will do everything it can to prevent tax implementation; the second is that, as California has shown, industry can be defeated.

Much of legislative action on SSBs in the USA is at the state or local (city, county) level. The state of Vermont is another

example of a recent attempt to introduce a state excise tax on SSBs, proposing a tax doubling the existing penny-per-ounce (US$ 1 per almost 3 litres). Given very low SSB prices in the USA, this translated into a tax burden of, on average, approximately 50%. One of the challenges for economists is to predict the response of consumers (i.e. price elasticity) when taxes are very high, and have not been evaluated based on prior data. Another is to anticipate the tax pass-through rate (i.e. how much the tax gets passed into the price). Economic theory predicts a perfect pass-through (i.e. a 1 cent excise tax increases retail price by 1 cent). The first year, data from Berkeley suggested that the tax pass-through might be initially less than 1 cent, indicating that prices increase less than the amount of an excise tax imposed *(34)*.

Cross-price elasticity data are very limited and unstable, with much variation across studies. Most studies predict a shift primarily to bottled water and juice, while diet beverages have a positive cross-price elasticity with SSBs *(35)*. This is likely the result of the underlying data where promotions are usually the same for both diet and regular beverages (e.g. all products of a brand on sale). Shifts to food and the overall effect on diet should be also considered.

In the USA, the ongoing market trend is for a significant reduction in SSB consumption *(36)*, much higher purchases of bottled water, shifts away from soda towards water and new healthier (less caloric) beverages *(37)*. Per capita consumption of SSBs is still very high, which justifies policy action such as taxes. It is likely to have an effect on SSB consumption per se, since the campaign to pass a tax (even if unsuccessful) helps to educate consumers, encourages the industry to reformulate products, and reduces SSB consumption.

United States of America: Supplemental Nutrition Assistance Programme

The Supplemental Nutrition Assistance Program (SNAP) provides food-purchasing assistance for low- and no-income people living in the USA. The effect of providing financial incentives to participants of the SNAP at the point-of-sale was recently evaluated in a randomized control trial. Known as the Healthy Incentive Pilot (HIP), the study showed that a 30% subsidy of targeted fruit and vegetable purchases increased their consumption, by SNAP participants, by 26% *(38)*. This would be predicted by price elasticity data from prior research *(39)*. There was no effect on total energy intake and no change in SSB and "junk food" intake. No cost-benefit analysis was done in this evaluation, but it is unlikely that the intervention would be shown to save money.

There are also incentive programmes, known as "double-buck programmes", that provide a match to SNAP benefits for fruit and vegetable purchases at farmers' markets *(40)*. These, mostly privately-run, programmes give low-income consumers "double bucks" (or "health bucks") coupons that double the value of food stamps at farmers' markets and occasionally grocery stores for buying fruits and vegetables. The Food Insecurity and Nutrition Incentive (FINI) grant programme, authorized in the Agricultural Act of 2014, will provide US$ 100 million over 5 years to support projects that increase purchases of fruits and vegetables among SNAP participants by providing incentives at the point of purchase *(41)*.

Using price policies to promote healthier diets in Europe

In 2015, the WHO European Region published a document on the use of price policies to promote healthy diets *(42)*. The document provides information on the use of price policies to promote healthy diets and explores policy developments from around the WHO European Region. It examines the economic theory underpinning the use of subsidies and taxation and explores the currently available evidence.

The publication includes several case studies from WHO European Member States where price policies have been introduced, including Denmark, Finland, France, Hungary and the EU School Fruit Scheme.

Specific factors to consider in the design of effective price policies include possible substitution effects, the tax mechanism chosen, price pass-through, and impact on health inequalities. Price policies can also be implemented to influence supply-side factors. Comprehensive monitoring and evaluation, using carefully selected indicators, is essential in using price policies.

The document concludes that fiscal policies are an important tool in tackling unhealthy diets and NCDs and that there is significant scope in the future for countries across Europe to advance their implementation. From the evidence, taxes on sugar-sweetened beverages and targeted subsidies on fruit and vegetables emerge as the policy options with the greatest potential to induce positive changes in consumption; however there is also demonstrable positive impact with other approaches. Experience with the implementation of such policies in the Region has shown that they are feasible and can influence consumption and purchasing patterns as intended, and have a significant impact on dietary and health-related behaviour. The revenue raised has, in some cases, been successfully ring fenced for the health budget. Continued monitoring and evaluation is considered important, particularly in terms of establishing baseline data at the outset in order to monitor the effects of the policy.

5. Implications for design and implementation of fiscal policies

A typology for consideration

When designing fiscal policies on diet, key questions to consider are *(42–44)*:

1. What type of tax to apply?
2. What tax structure to implement?
3. What products to tax?
4. What are the implications for revenue generation and diet/nutrition-related programming?

Excise tax is tax levied on manufacture, sale, use, or distribution. It may also include a fixed fee or levy on a purveyor. A special value added tax (VAT) applies to the production and distribution of goods. It is considered a consumption tax because the ultimate cost is borne by the consumer at point of purchase.

A tax can be specific or ad valorem. A specific tax is levied on the basis of product size or amount. An ad valorem tax is a percentage of the product value (Figure 3).

Figure 3: ***Types of taxes***

	Excise Tax	VAT
Specific	+	
Ad valorem	+	+

Consistent with the evidence on tobacco taxes, specific excise taxes (where a set amount of tax is charged on a given quantity of the product or specific ingredient) are likely to be most effective. This is because they reduce incentives to switch down to cheaper options, in that they increase the price of all products affected by the tax in the same way. They also provide more stable revenues, are not subject to industry price manipulation and are easier to administer. In order to prevent the impact of specific taxes from being eroded over time, it is essential that they be adjusted regularly to, at least, keep up with inflation and reduce affordability of the taxed product by accounting for income growth as well.

In countries with strong tax administration, taxes that are calculated based on nutrient content (e.g. SSB taxes based on sugar content) can have the greatest impact, as they differentiate between options based on nutrient content within a product category and can be used to incentivise consumers to substitute to alternatives while simultaneously encouraging producers to reformulate their products. In countries where tax administration is not as strong, simpler tax systems (e.g. a volume-based SSB tax) may be more appropriate.

WHO's tobacco taxation experience

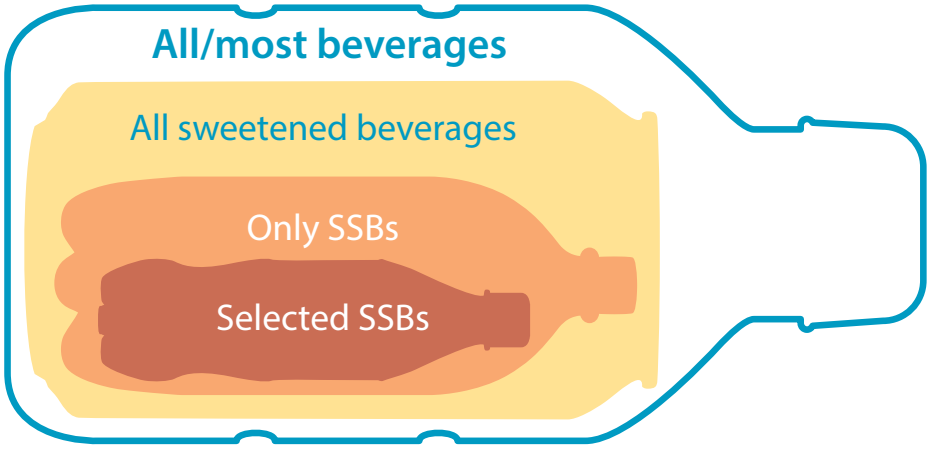
Since 2009, WHO has been working closely with Member States to improve and increase their excise taxes on tobacco products and to reduce their affordability. There are different types of indirect taxes applicable on tobacco products. It is important to focus on excise taxes (specific, ad valorem and mixed) as a public health policy rather than other taxes in order to increase the relative price of the targeted product effectively and to reduce consumption.

One of the main conclusions derived, and lessons learned, from tobacco taxation is the importance of implementing specific excise taxes, or a mixed system, relying more on the specific excise component. These taxes lead to higher prices, reduce gaps within products – therefore reducing risk of substitution – and are easier to administer. However, specific excise taxes need to be adjusted to inflation – and ideally to income as well – in order to effectively reduce affordability and discourage consumption over time. Additionally, tax policies have to be accompanied by a system that closely monitors products throughout the supply chain (track and trace). This will reduce the chance of products ending in the illicit market.

Fiscal policies and price elasticity

The responsiveness of consumers to price changes (price elasticity) for the food and beverage products that may be taxed is central in the design of taxes for health promotion. When consumers can substitute alternative products, their response to price increases will be greater; but not all substitutions are likely to be desirable. Carefully designing the tax base (range of products to be taxed) will help to prevent undesirable substitutions, and possibly steer substitutions towards healthy alternatives (Figure 4).

Figure 4: ***Different tax base options for beverages***



In most cases, however, the demand for foods and beverages is typically inelastic (i.e. consumers are not very responsive to price changes). This should not be viewed, per se, as hindering the pursuit of public health goals. It simply means that the tax rate will have to be high enough to reduce the consumption of the taxed products to an extent that will generate meaningful health effects. A low price elasticity also makes the tax more likely to be passed on to consumers by suppliers (i.e. prices will increase at the point of consumption). Moreover, tax revenues will be larger than in the case of products with a more elastic demand, providing greater opportunities for funding other health promotion activities.

There are areas in which taxation practice is not entirely in line with theory and some of these deviations might be desirable from a public health point of view. For instance, there is a broad consensus on excise taxes (particularly, specific excises regularly adjusted for inflation) being the fiscal tool of choice in the pursuit of public health goals, at least in the area of food and non-alcoholic beverages.

However, the public health community has also called for the use of positive fiscal incentives, for instance to stimulate the consumption of healthy foods. This goal could be pursued via the indirect tax system through rate differentiation in value added or sales taxes.

Health and substitution effects of fiscal policies

The overall health effects of food and beverage taxes depend on the price elasticities of demand, which are composed of the income and substitution effects. The size of the substitution effect depends on the extent to which there are available substitutes, for example from SSBs to water, milk, unsweetened 100% fruit juice and beverages with non caloric sweeteners. Close substitutes give rise to a large substitution effect. The income effect depends on the extent to which consumers are able, or willing, to change behaviour. Lack of behavioural change might imply that consumers feel burdened by the tax and have less money to buy either unhealthy or healthy foods.

It is important to consider the tax base since the overall health effects of the tax depends on the availability of substitutes for different types of consumers. Consumers might substitute to a healthier type of product, to another type of unhealthy product, to a cheaper brand or store. Correct design of the tax and correct choice of the tax base could minimize any potential adverse unexpected health effects of food and beverage taxes *(45–48)*.

Vulnerable populations, including low-income consumers, young people, and those most at risk of obesity, are most responsive to changes in the relative prices of foods and beverages. Well-designed taxes targeting non-core foods with close, healthier (untaxed) substitutes may result in greater behaviour change and would minimize tax regressivity. There is potential for taxes to be further supported by complementary subsidies targeted to low-income populations.

Overcoming barriers to fiscal policies

Countries experience great challenges in policy implementation from the undue pressure of the food and beverage industries. Oppositional arguments against taxes are usually either false or greatly overstated. Common myths relate to the impact on jobs, businesses, those on a low income, and tax avoidance. As has been confirmed by recent studies in California and Illinois in the USA, SSB taxes are likely to lead to a net increase in jobs, in spite of a small decrease in jobs in the beverage sector *(49)*. This occurs because consumers redirect their purchases towards untaxed products thus stimulating growth in other non-beverage sectors. A study conducted in the USA between 1997 and 2009 found that, contrary to predictions from the tobacco industry, there was an increase, rather than a decrease, in the number of convenience stores. This was due to consumers shifting to buying other products and thus creating more demand for those products.

Low-income populations have the largest health benefit from taxes, because their pre-tax SSB consumption is high and post-tax reductions in consumption are relatively large. The benefits for these populations are even higher if tax revenues are used for targeted obesity prevention and health promotion programmes and if targeted subsidies for healthier options exist. There is likely to be little tax avoidance and evasion in response to an SSB tax. The strength of governance and presence of informal distribution networks have a greater effect than tax and price levels in driving tax avoidance and evasion.

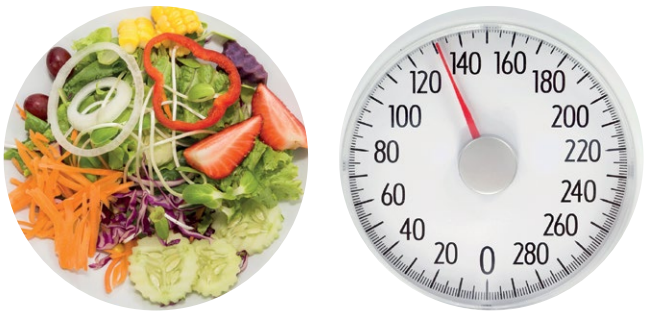
The role of civil society and health professionals is critical, not only to counteract undue pressure from food and beverage companies, but also to monitor fiscal policies and ensure their appropriate implementation.

Regarding opposition to taxes, fundamental lessons are to be learned from the experience of countries implementing SSB taxes. Firstly, the beverage industry will do everything it can to avoid taxes, using the same well-financed – and well recognized – scare tactics used by the tobacco industry. In 2014, for example, the beverage industry spent more than US$ 10 million fighting SSB tax measures in Berkeley and San Francisco, outspending proponents by 18:1, with 99% of funds provided by corporate interests outside of California. Tactics ranged from buying television and radio advertisements, paying for advertising billboards, lawn signs and advertising space in subway stations (including

the floor space) as well as paying members of the community to go from house to house canvassing support. Claims were made that the tax was unfair to poorer people; that it would harm small businesses; and that revenues would not be spent as promised. It was also stated that the government should not interfere with the personal choices of consumers.

A further lesson learned is that, regardless of pressure and finance from industry, any opposition to taxation can be overcome with a well-planned campaign involving a broad coalition of supporters (from community leaders and health-oriented organizations to grassroots people and organizations), the ability to respond to the beverage industry's propaganda, and sufficient resources. The objective would be to inform populations of the truth of potential harm caused by the products. The experiences from countries such as the USA (in particular the city of Berkeley in California) and Mexico prove how policies can be progressed even amidst great industry opposition.

As countries around the world enact these policies, an ever-greater movement to support other countries to do the same will be created. As with the tobacco industry, the beverage industry is concerned that rates of SSB consumption are dropping. However, as an increasing number of taxes, warning labels, and other policies are enacted around the world, this drop may continue and, as a result, diets will become more healthy.



Nutrient profiling

Health-related taxes applied to foods and beverages must define the foods to which the tax applies, and this often requires some form of nutritional criteria underpinning the tax. Lack of such criteria or standards for determining exactly what to tax is a challenge experienced by many countries. The development of a nutrient profile model is, therefore, considered important in identifying the categories of foods subject to the tax and the nutrient thresholds that apply, thus providing a tool for countries to implement fiscal policies.

Nutrient profiling is the science of classifying or ranking foods according to their nutritional composition for reasons related to preventing disease and promoting health. Nutrient profiling can be used for various applications, including the marketing of foods to children; health and nutrition claims; product labelling logos or symbols; information and education; provision of food to public institutions; and the use of economic tools to orient food consumption.

The initial request for WHO to initiate nutrient profiling came in 2007 when the first technical meeting was held to review the existing evidence on the effects of marketing of food and non-alcoholic beverages to children. The ad hoc development of models by different stakeholders was leading to inconsistencies and confusion for target audiences and consumers.

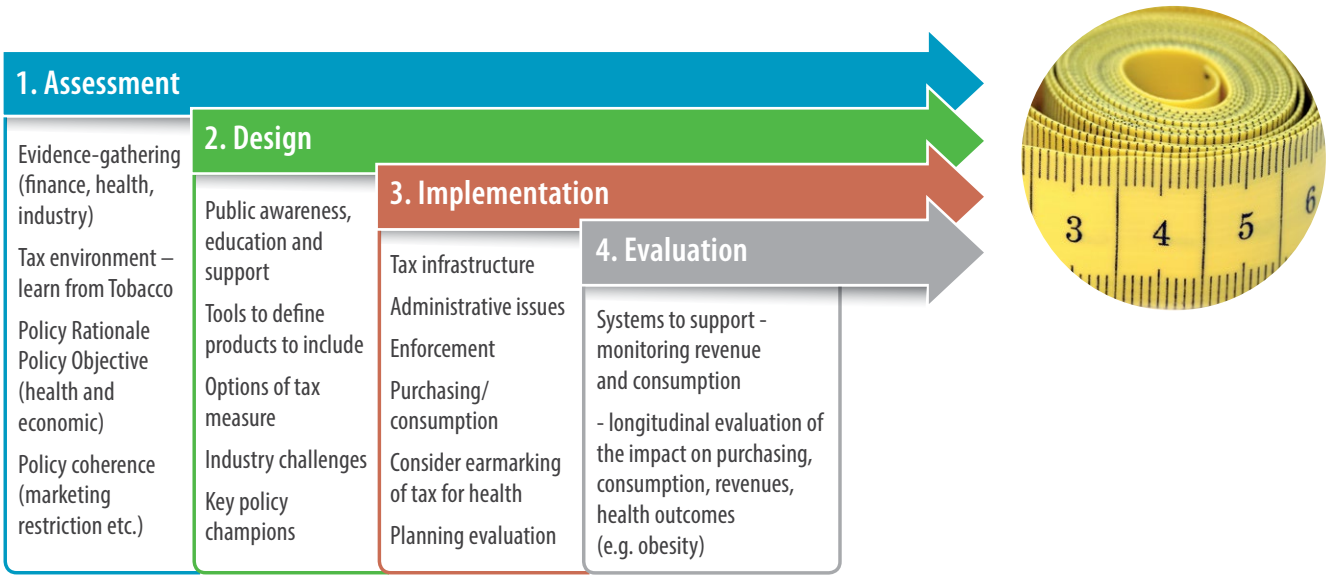
In 2010, WHO prepared guiding principles and a framework manual for the development and adoption of nutrient profile models. The main lesson learned from pre-testing the manual was that it is easier to adapt an existing model than to develop an entirely new model. WHO will review and update the manual after country field-testing.

Regional nutrient profiling models for regulating the marketing of foods and non-alcoholic beverages to children have already been developed in the WHO European and American Regions, and are in the process of being developed in the Eastern Mediterranean Region, and the South-East Asia and Western Pacific Regions. WHO aims to prepare a global nutrient profile model for: the marketing of food to children; school food procurement; fiscal policies; and product labelling (i.e. front-of-pack labelling).

Policy development

The importance of a good policy development process needs to be reinforced when developing fiscal policies (Figure 5). An assessment, using all existing relevant information, should inform appropriate objective-setting and advocacy and use key policy champions and the broad coalition of partners for both political buy-in and for countering industry challenges. Nutrient profiling – or similar tools – need to be developed to define products to be taxed as a key part of the multidisciplinary drafting of the policy. In implementation, tax structure and administrative issues should be considered as well as the monitoring of purchases and consumption, while planning for evaluation and consideration for earmarking of tax for health is further discussed. Evaluation of the impact of the policy on purchasing, consumption, revenues, and, ultimately, health outcomes (e.g. obesity) is needed, so some consideration for longitudinal design should be given. Policy coherence is needed to ensure maximum impact of fiscal policies on diet. The requirement of warning labels on taxed products – as an education strategy and to limit the marketing of taxed products particularly for children – were discussed as examples.

Figure 5: ***Fiscal policy development and implementation framework***



Earmarking of tax revenues

The earmarking of tax revenues is used in many countries, including in connection with taxes for health promotion. Earmarking may be aimed at strengthening health promotion actions, for example by funding education campaigns or healthy food subsidies, or at limiting the regressive impact of taxation (when the impact is indeed regressive). In all cases, earmarking will improve the transparency of the taxation process and use of revenues, which will increase the acceptability of the tax by politicians and the general public. When the objective of the tax policy is health, rather than solely economics, it may be easier to discuss earmarking for health in that context.

6. Conclusions

At the end of the meeting the following conclusions were made:

- Growing evidence shows that appropriately designed fiscal policies, when implemented with other policy actions, have considerable potential for promoting healthier diets. They will also improve weight outcomes and other diet-related risk factors, and will ultimately contribute to the prevention and reduction of the health and economic burden of NCDs. The use of fiscal policies should therefore be considered a key component of a comprehensive strategy for prevention and control of NCDs.
- The evidence for meaningful health effects is strongest for taxes on sugar-sweetened beverages, with suggestions that SSB prices would need to be raised by 20%, or more. Such taxes lead to more than proportional reductions in SSB consumption and net reductions in caloric intake, and thus contribute to improving nutrition and reducing overweight, obesity and NCDs.
- Similarly strong evidence shows that subsidies for fresh fruits and vegetables, that reduce prices by 10–30%, are effective in increasing fruit and vegetable consumption. While evidence is mixed on the net effect of fruit and vegetable subsidies on net caloric intake and weight, overall diet quality improves, with a resulting improvement in health outcomes. Greater effects on the net energy intake and weight may be accomplished by combining subsidies on fruit and vegetables and taxation of target foods.
- Taxation of other target foods and beverages, particularly those high in saturated fats, trans fatty acids, free sugars and/or salt appears promising, with existing evidence clearly showing that increases in the prices of target options reduces their consumption. Evidence will emerge from countries that have recently implemented such taxes showing the impact on health and other outcomes – for example NCD mortality.
- Vulnerable populations, including low-income consumers, young people, and those at most risk of obesity, are most responsive to changes in the relative prices of foods and beverages. It is beneficial to target non-core foods and foods for which good healthier alternatives are available.
- Consistent with the evidence on tobacco taxes, specific excise taxes (where a set amount of tax is charged on a given quantity of the product or specific ingredient), as opposed to sales or other taxes based on a percentage of retail price, are likely to be most effective. This is because they reduce incentives to switch down to cheaper options, in that they increase the price of all products affected by the tax in the same way. In order to prevent the impact of specific taxes from being eroded over time, it is essential that they be regularly adjusted to keep in line with inflation and to reduce affordability of the taxed product by accounting for income growth as well.
- In countries with strong tax administration, taxes that are calculated based on nutrient content (e.g. SSB taxes based on sugar content) can have the greatest impact, as they differentiate between options based on nutrient content within a product category and can be used to incentivise consumers to substitute to alternatives while simultaneously encouraging producers to reformulate their products. In countries where tax administration is not as strong, simpler tax systems (e.g. a volume-based SSB tax) may be more appropriate.
- Earmarking of tax revenues may be challenging in some countries, but dedicating some, or all, of the revenues generated by these taxes for efforts to improve the health care system, encourage healthier diets through health promotion and nutrition education campaigns, increase physical activity, as well as to build capacity for effective tax administrative processes (i.e. for monitoring and enforcement) may increase public support and facilitate the implementation of earmarking of the revenues.

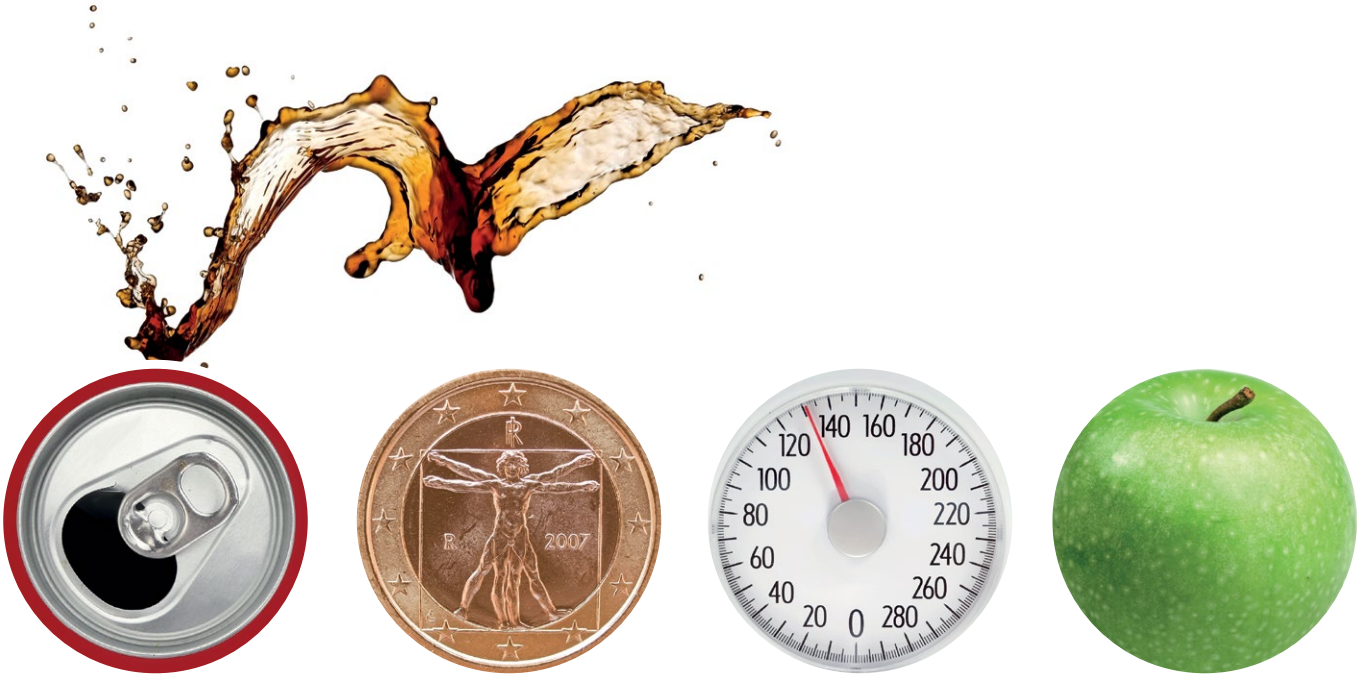
- Many countries implementing fiscal policies lack formal evaluations leading to a shortage of data on the impact. Monitoring and evaluation efforts are critical in documenting the effectiveness of the taxes in achieving their objectives, both in terms of revenue and its use; impact on purchase patterns; consumption; and product composition for targeted products and close substitutes, in addition to relevant health outcomes, while identifying any unanticipated effects (e.g. substitution to non-sugar sweeteners).
- Lack of standards or criteria for determining exactly what to tax is a challenge experienced by the countries. Development of a nutrient profile model is, therefore, considered an important action in providing a tool for countries to implement fiscal policies. For countries for which there is a broad knowledge base on nutrient contents of products this might be used to include/exclude products from taxation.
- Countries experience great challenges of implementation from undue pressure from the food and beverage industries. The role of civil society and health professionals, not only to counteract this pressure, but also to monitor and ensure the appropriate implementation of fiscal policies is critical.
- Policy coherence is needed to ensure maximum impact. Requiring warning labels on taxed products as an education strategy and limiting the marketing of taxed products, particularly for children, were discussed as examples.
- The importance of a good policy development process needs to be reinforced when developing fiscal policies.
    - A proper situation analysis using all existing relevant information should inform appropriate objective-setting and the multidisciplinary drafting of a policy and implementation plan that includes advocacy for political buy-in, monitoring and evaluation.
    - It is also important in this process to be proactive in counteracting the industry arguments and efforts to oppose the development and implementation of tax measures or attenuate their effects. A public awareness or education programme to inform the public about the positive health consequences, address any potential negative effects of the tax and keep a positive public opinion is useful, as it has been shown to have some effects even if, ultimately, the tax policy is not passed.



7. Recommendations

It is recommended that:

- the report of the meeting be disseminated for use by countries as information to assist in the development and implementation of fiscal policies as appropriate;
- the current evidence gap – including the impact of SSB tax on improving weight and health outcomes, and ultimately the prevention of NCDs – be addressed through research and evaluation in countries;
- a nutrient-profiling tool be developed for use by countries for the implementation of fiscal policies;
- an implementation manual be developed to provide further guidance to countries on the development and implementation of fiscal policies for diet.



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Annex 2. Meeting programme

Tuesday, 5 May 2015

08:30–09:00	Registration
09:00–09:30	Opening • Welcome Remarks *Assistant Director-General, Noncommunicable Diseases and Mental Health* • Election of Chairperson and Rapporteur • Introduction of participants • Adoption of agenda and programme • Administrative arrangements
09:30–10:30	• Noncommunicable diseases overview, and role of fiscal measures *Dr Temo Waqanivalu* • Review of existing systematic reviews of fiscal policy interventions to improve diets *Dr Anne Marie Thow* • Existing evidence and guidance on fiscal policies *Dr Frank Chaloupka*
10:30–11:00	Coffee Break
11:00–11:30	Tobacco taxation experience *Mr Mark Goodchild, Ms Anne Marie Perucic*
11:30–11:45	Using price policies to promote healthier diets in the WHO European Region *Mr Jo Jewell*

11:45–13:00	• Countries' experiences in fiscal policies
	• Objective of tax
	• Definition/scope of tax
	• Tax structure (tax rate, tax base)
	• Development, implementation and administration
	• Impacts
	  • Mexico – *Dr Arantxa Colchero*
	  • Egypt – *Mr Mohamed Madbouly*
	  • Finland – *Dr Sirpa Sarlio-Lähteenkorva*
	  • France – *Dr Michel Chauliac*

13:00–14:00	Lunch Break
14:00–14:30	Countries' experiences in fiscal policies (cont'd) • Hungary – *Dr Eva Martos* • Mauritius – *Dr Anil Deelchand*
14:30–15:30	Countries' challenges in implementing fiscal policies • Denmark – *Associate professor Sinne Smed* • Philippines – *Ms Estrellita B. Suansing* • Thailand – *Professor Thaksaphon Thamarangsi* • United States of America – *Dr Harold Goldstein* • Ecuador – *Ms María José Ramírez*
15:30–16:00	Coffee Break
16:00–17:00	Discussion
18:00	Reception

Wednesday, 6 May 2015

09:00–09:15	Summary of Day 1
09:15–10:45	Evidence of fiscal policies • Retail prices: industry structure and fiscal policies • Own price elasticities: final retail prices, use and consumption • Own price elasticities: socioeconomic groups and target populations (e.g. youth) • Cross price elasticities: implications for the tax base (e.g. which products to tax or not to tax) *Dr Tatiana Andreyeva* *Professor Michael Jacobson* *Associate professor Sinne Smed* • Discussion
10:45–11:15	Coffee Break
11:15–12:45	Policy implications of fiscal policies • What type of taxation: excise or special VAT (sales taxes) rates? • What tax structure: specific or ad valorem? • Impact of tax rates and tax systems on final retail prices. • Fiscal policies and revenue generation potential. • Nutrient profiling to identify target foods and benchmarks *Professor Jamie Chriqui* *Dr Franco Sassi* *Dr Chonlathan Visaruthvong* *Dr Chizuru Nishida*
12:45–13:45	Lunch Break
13:45–15:30	Two working groups: identification of gaps, considerations and directions to take for each of the following questions: 1. What are the economic and health justifications for fiscal policies? 2. What could be the best approach for a good fiscal policy design?
15:30–16:00	Coffee Break
16:00–17:00	Report back by groups, and discussion
17:00–17:30	Closing remarks and next steps

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