

Case study:

The Hungarian public health product tax

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Produced by the UK Health Forum and commissioned by the Health Foundation.

Authors: Alison Giles, Danielle Costigan, Hannah Graff, Rebecca Stacey and Modi Mwatsama

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Case study: The Hungarian public health product tax

Summary

In 2011, the Hungarian Minister for Health faced two issues. The first was pressure from the finance ministry to find funding for the health service to increase the wages of health staff. The second was worsening health statistics among the population. His solution was to introduce a tax on unhealthy food and beverages that would deliver financial and health benefits. On the one hand, it would create a sustainable revenue stream that could be hypothecated for health care spending. On the other hand it would encourage healthier eating habits among Hungarians and encourage manufacturers to reformulate products to reduce their salt, sugar and caffeine content.

A variety of data was used to develop the tax that included population dietary surveys, population estimates of obesity and other diet related conditions, and an analysis of the nutritional composition of the different types of foods that were contributing to poor diets. The Minister convened a working group with the National Institute for Health and Development, the National Institute for Food and Nutrition Science, the Ministry of Finance and the World Health Organization to analyse this data and formulate a robust, evidence-based rationale for the products that the tax would target.

Food industry opposition to the tax was strong. The industry complained to the European Commission that the tax would harm the industry and the Minister for Health was forced to respond. He successfully demonstrated that the tax was proportionate. The tax had the support of health NGOs, the medical profession and teachers, who had seen a direct correlation between the widespread consumption of energy drinks among pupils and poor behaviour in the classroom.

The Hungarian Parliament passed legislation in July 2011 and the tax was introduced in September 2011. It is an excise levy applied on the salt, sugar and caffeine content of pre-packaged foods for which there are healthy alternatives. Taxed products include sugar-sweetened beverages, energy drinks, confectionery, salted snacks, condiments, stock cubes, flavoured alcohol and fruit jams.

Two impact assessments on the public health product tax have been conducted. Following introduction of the tax, the prices of taxable products increased and their sales fell, and food manufacturers started to reformulate their products. Consumers changed their eating habits, choosing to eat less of the unhealthy products or to switch to other products. In its first four years of operation, the tax generated approximately US\$219m in revenue and made it possible to increase the wages of 95,000 health sector workers. Since 2016, companies have been encouraged to fund health promotion activities in exchange for a deduction in their public health product tax liability.

Following the success of the tax, the Hungarian Parliament has since passed legislation to eliminate the use of trans fats in food products, to ensure nutritional standards in public catering, and to improve the nutritional quality of cafeteria food in schools.

Introduction

This case study describes the development and implementation of Hungary's Public Health Product Tax. The tax was designed to i) reduce the consumption of food products containing unhealthy levels of sugar, salt and caffeine; ii) promote reformulation of processed foods; and iii) create additional revenue to fund health services. The case was informed by an interview with an individual from the health sector in Hungary.

Timeline

Year	Event
1985-2004	Three national dietary surveys conducted in Hungary ^(1, 2)
2002	Election of Hungarian Socialist Party to government
2004	Hungarian National Public Health Programme Action Plan published ⁽³⁾
2005	Dietary guidelines for the adult population in Hungary published (4)
2005	Hungarian National Nutrition Policy Framework published ⁽⁵⁾
2006	Re-election of Hungarian Socialist Party in coalition with Alliance of Free Democrats
2007	European Commission White Paper published: A Strategy for Europe on Nutrition,
	Overweight, and Obesity-related health issues ⁽⁶⁾
2007	Hungary unsuccessfully pushes food industry on reformulation
2008	EU Framework for National Salt Initiatives published ⁽⁷⁾ and Hungary joins high-level
	EU group on salt reduction
2009	Hungary launches national salt reduction initiative with food industry
2009	Hungarian National Nutrition Policy Framework revised ⁽⁸⁾
2010	Election of right-wing Fidesz party to government with absolute majority
2010	Fidesz government implements suite of controversial taxes targeting the largely
	foreign-owned telecom, retail, energy, banking and insurance sectors
2011	Public health product tax introduced in Hungary
2012	First evaluation of the public health product tax published (9)
2013	PricewaterhouseCoopers' assessment of the public health product tax produced ⁽¹⁰⁾
2014	Second evaluation of the public health product tax published (11)
2014	Hungary adopts legislation to ban trans fats in food processing
2015	Hungary adopts legislation to improve nutritional standards in public catering, and
	improve the nutritional quality of cafeteria food in schools

Background to the public health product tax

Context

Hungary is a land-locked country in central Europe with about 10 million inhabitants. It is a medium-sized member state of the European Union, which it joined in 2004. Hungary is an OECD high-income economy with a high standard of living. (12) However, income inequality and (relative) poverty rates have increased since 2007, with 35% of Hungarians defined as materially deprived. (13) Hungary has a universal, albeit underfunded, health care system. (13)

Parliamentary elections are held every four years. At the country's first democratic election in 1990, a conservative-led coalition was formed. For the following 20 years the governing party alternated between conservative and socialist. However, the popularity of the socialist movement declined after their election in 2006 and in 2010, the populist national-conservative Fidesz party was elected with an absolute two-thirds majority in parliament. (12) They have held power ever since.

The Fidesz party inherited an economic crisis and an International Monetary Fund bailout programme. The government set in train controversial tax reforms, introducing a flat-rate 16 per cent income tax to encourage more people into work, and imposing 'crisis taxes' on the privatised telecom, retail, energy, banking and insurance sectors that were largely in foreign ownership. The taxation measures provoked accusations of discrimination against foreign investors from the European Commission. ⁽¹⁴⁾

In spite of the country's relative affluence, Hungary's health status is poor. In 2015, life expectancy at birth in Hungary was 75.7 years, almost five years below the EU average of 80.6 years⁽¹³⁾. As in other countries, socioeconomic differences in life expectancy persist, with life expectancy at age 25 among Hungarian men and women who have completed university education more than 10 years higher than those who have not completed secondary education. (13)

Cardiovascular diseases remain the leading cause of death for both women and men in Hungary. In 2014, they accounted for 55% of all deaths among women, and 45% of all deaths among men. Death rates (age-standardised) from cardiovascular diseases in Hungary were more than double the EU average in 2014. The second leading cause of death among women and men in Hungary is cancer, accounting for 23% and 29% of all deaths, respectively. (13)

Nearly 40% of the overall disease burden in Hungary in 2015 could be attributed to unhealthy lifestyles, including dietary risks. (13) For example, Hungary has one of the highest average per capita salt consumptions in the European Region at 12.5g per day. (15)

The prevalence of obesity among adults increased from 18% in 2000 to 21% in 2014, the third highest rate in the EU after Malta and Latvia. One in four adults in the lowest income group was obese, compared with one in six among those in the highest income group. (13)

Food policy in Hungary 2004-2011

Three national dietary surveys of the adult population were performed in Hungary between 1985 and 2004. The First Hungarian Representative Nutrition Survey was carried out in 1985–1988 and

the Second Hungarian Nutrition Survey in 1992–1994. The Third Hungarian Nutrition Survey was performed in 2003–2004. The surveys indicated that the proportion of daily energy intake derived from dietary fat in Hungary was higher than the Eurodiet recommended maximum of 30%. The average carbohydrate intake was lower than the Eurodiet recommended minimum of 50% although, among the EU countries, Hungarian men and women had the highest average sucrose intakes. In 2004, almost two thirds of men and half of the women were overweight or obese.

Hungary's National Public Health Programme Action Plan was published in 2004 by the Ministry of Health, Social and Family Affairs⁽³⁾ and one of its 19 goals dealt with nutrition. The Plan led to the National Nutrition Policy Framework that was published in 2005 by the National Institute for Food Safety and Nutrition.⁽⁵⁾

The National Nutrition Policy Framework covered the period 2006–2010 and set out to tackle dietrelated non-communicable diseases and the prevention of overweight and obesity. It was based on the recommendations of the nutrition division of the WHO European Office. (16) It analysed the main trends in nutrition habits of the population, as evidenced by the three Hungarian nutrition surveys, and led to actions on a range of topics including:

- food trade and distribution
- food price controls, including the affordability of vegetables and fruit
- production and availability of certain food products
- nutrition and food safety, including improving quality of food in hospitals
- education in schools
- provision of lifestyle counselling by health professionals
- improving the energy and nutrient content of foods
- improving food labelling in line with EU regulations.

Food-based dietary guidelines were drawn up in 2001 and revised by the Ministry of Health in 2004 in conjunction with the National Institute for Food and Nutrition Science and a number of experts. (4)

In May 2007, the European Commission adopted a *Strategy for Europe on Nutrition, Overweight and Obesity related health issues*. ⁽⁶⁾ This set out a number of priorities for Member States including 'making the healthier option available'. It included addressing the nutrient composition of manufactured foods and food reformulation initiatives to reduce the levels of fat, saturated and trans fats, salt and sugar in foodstuffs. The Strategy called on the food industry to make demonstrable improvements.

The Hungarian health sector used this strategy as the impetus for engaging with the food industry to try and drive food reformulation to promote healthier diets.

'After the publication of the [EU] food strategy [...] there were several negotiations with the food industry [in Hungary], in the field of voluntary reformulations. But nothing happened. Nothing happened. So the results were shown, the results of salt intake, sugar intake, and the problem of energy drinks and so on, were presented to the food industry actors, but nothing happened.'

The European Commission brought together a High Level Group of Member States' representatives, aimed at addressing a range of health topics related to nutrition and physical activity through the exchange of good practice. Salt reduction was the Group's first priority for discussion. Hungary had a representative on this group.

Member States agreed to the creation of a common European Union Framework on voluntary national salt initiatives, ⁽⁷⁾ setting a benchmark of a minimum of 16% salt reduction over four years for all food products. The Framework was approved by the High Level Group in July 2008, with the understanding that participation was voluntary.

'Well you know [...] the hypertension rate in the Hungarian population is about 30% among adults, [...] The salt intake it was worst among the European countries. It's evidence that you should do something with the salt intake and [Hungary was part of the high level group on nutrition and physical activity of the commission.] In 2009, based on the salt reduction strategy of the commission, we had in the Ministry of Health a very, very wide discussion on the salt reduction of different foods. So we published... with the agreement of the food industry, the Hungarian salt reduction initiative. There's several elements. If we're following the composition of these foods from 2009 to 2011, nothing happened. There was nothing.'

Source: commentator from the health sector

Hungary's National Nutrition Framework was revised in 2009⁽⁸⁾ and included a dietary salt target.

2011: a new imperative to act

In 2011 two issues came together that increased the pressure on the Ministry of Health to adopt a new approach to diet and nutrition. The first was pressure from the finance ministry to address the underfunding of the health service, and in particular doctors' salaries, which was leading to health professionals seeking jobs in other countries. The second was that the health status of Hungarians was worsening.

'...by the end of 2010, 2009, it became the problem of the low salaries of the health care provider [...] because most of the ... several doctors went abroad because of the low salaries and it was very important to find a solution. The other part, I think the other reason could be that the state secretary was very sensitive to the public health issue.

'I think because the Ministry of Health had a big pressure from the side of the Ministry of Economy to find financial resources to improve the salaries of doctors and to find some solutions against the very, very bad public health data of the Hungarian population. Because it has a financial context, financial consequences [...] so that was a complex reason and they had to find a complex solution.'

Source: commentator from the health sector

As outlined above, the Fidesz government had been elected in 2010 on a populist reform agenda that included numerous taxation measures. In this context, the Health Secretary recognised that a public health product tax would be looked on favourably by the government and could provide the solution to both the issues he was grappling with. He worked with the Ministry of Health, the

National Institute for Health and Development, the National Institute for Food and Nutrition Science, the Ministry of Finance, and the World Health Organization to formulate the tax. (17)

'It was not an easy procedure. At first a special committee was set up in the Ministry of Health, so it's the State Secretary who is responsible for this. So he was who led this project and who had the idea to introduce something, especially to health, to have financial resources. But not only for this. [...] in this committee several experts were invited into this committee. One for example, the head of the Hungarian WHO office [...] Later on when the rationale behind the taxation was developed, the Ministry of Economy was also involved. So there was a big discussion. It was about five or to six months, maybe one year project for the preparation of the philosophy and so on.'

Source: Commentator from the health sector

A key motivation for the tax was the need to increase funding for the health sector. Further, the Government was motivated to make individuals contribute towards the social and economic costs of an unhealthy diet.⁽¹⁸⁾

'We have to take brave steps both to rescue and renew the health care cause. Cultural renewal is important in this area also. We should not start out from the disease, but from health. The culture of common sense and responsibility can be enforced in this area only if we work out new solutions in recognition that human health is the same valuable personal capital as an apartment, assets, or a car. Therefore whoever wastes this capital through an unhealthy way of living should contribute to our expenditure on health preservation to a larger extent.'

Source: speech by Prime Minister Viktor Orbán at the opening of Parliament, 14 February 2011⁽¹⁸⁾

The National Institute for Food and Nutrition Science collected and analysed very detailed data on the consumption behaviour of the population, the prevalence of obesity and other diet related conditions in the population, and on the nutritional quality of the different types of foods that were contributing to poor diets.

The institution had a laboratory and the institution was responsible for conducting a national diet and nutrition survey for the population. So [...] in a certain period the institution conducted this kind of survey, so we have objective data... as regard of the nutritional status of the Hungarian population. Or we have data about salt consumption of the Hungarian population in that period [...] and so on. The sugary drink consumption of the youngsters was very high and every 3.7 decilitre that day and so on.

'So we had data prior to the development of this Act for example, about the sugar content of soft drinks. Or we had data about the salt content of salty snacks. We had data about the sugar content of different chocolates and other sweets, you know. So we had measured the caffeine content of energy drinks. Also we had data of taurine content of energy drinks, and you know, it was very good used by the ministry... during the development process.

'[...] Another thing was in the benchmarking, that we tried to find a threshold which is not so difficult to reach by the industry.'

Teachers successfully campaign for energy drinks to be included in the tax

Unusually, Hungary took the step of including energy drinks in the proposals for the product tax. This was influenced by the teaching profession, which had observed the correlation between children's consumption of energy drinks at breakfast time and poor behaviour in the classroom and wanted the Ministry to take action.

'Our first bad experiences was when we initiated a programme or institution entitled Start With Breakfast Programme... because it appeared that most of the children don't have a breakfast diet before going to school. [...] So it was a pilot. It appeared that a high percentage, I mean 30% of children of a very young age consume an energy drink for breakfast. Then we had... we started to communicate this and as a fact, this bigger survey was initiated by... the Chief Medical Officer's office. Because it has a media echo, the teachers and school masters wrote several letters complaining the children [sic]... some children's behaviour during the class... and they ask whether it could be the effect of an energy drink consumption. At that time it had been that there... also emergency cases involved children because of energy drink consumption. [...] It was very cheap; it was put in one litre bottles and so on and so on. So it was a real problem. The teachers and school masters wrote a letter for the government and for our institutions to do something with that.'

Source: commentator from the health sector

In an interview with *The Lancet* in August 2011 (19), Andras Nagy, president of the board of the Hungarian National Heart Foundation, said:

'We are extremely pleased. We have long been strong advocates of a tax like this and are very optimistic that it will bring results [...] We would have liked to have seen the taxes also including fats and in some ways one could say that this does not go far enough.'

Source: Lancet interview with Hungarian National Heart Foundation (19)

Opposition from the food industry

The food industry in Hungary, and organisations representing it, were opposed to the introduction of the public health product tax from the start of the process.

'First of all the Hungarian federation of food industries is an organisation of the food industry, published a resolution or something like that, that this Act would be very harmful and regressive and it doesn't solve the problem of obesity and doesn't solve the public health problem... and there will be the competitiveness will decrease, this Act will affect especially the small and medium enterprises. What else? Why the government tells the population what to eat, it's the right of the population... Most of them are multinational companies. So apart from this Hungarian association of the federation of food industry, most of them were multinational companies.'

Source: commentator from the health sector

The action of the Federation of Hungarian Food Industries was followed by other announcements stating that the tax was detrimental to the industry. The Hungarian Chocolate and Confectionery Manufacturers claimed that while the tax would have a minor effect on the salt and sugar intake, it would substantially increase losses in the affected industries.⁽²⁰⁾

The food industry appealed to the European Commission to block the public health product tax on the grounds that it was discriminatory to international food products. The Commission's view was that the proposed tax 'had no significant impact on international trade'. (21)

'So the government has to answer to the pressures of the commission, to the pilot proceedings. But... we could convince the commission that the law doesn't contain any discriminative elements, so we have to prepare a list of different products in different categories and to send to the commission and then for several examples of domestic products and from... and a list of other products.'

Source: commentator from the health sector

The food industry also commissioned the Hungarian office of the company PwC to conduct an impact assessment of the tax on different industry actors in Hungary. Their report⁽¹⁰⁾ put forward a number of arguments against the tax and it was sent to the Hungarian Prime Minister.

'It was very clear that this assessment was supported by the industry, you know. [...] So there were several arguments in this analysis against the taxation of course... The basis of this analysis was that the ingredients of... for example of salty snacks... contribute to the salt intake of the Hungarian population only by 0001% or something like this, yeah. So you know, and we had... could give the scientific answers for these, you know. I think it's also very important that the introduction of taxation had a very, very strong political feel... without the strong political commitment, it could be impossible to introduce taxation.'

The public health product tax

The public health product tax legislation was authored by a member of the ruling Fidesz party who was also president of the Strategic Alliance for Hungarian Hospitals. (22) It was passed in parliament in July 2011 owing to the absolute parliamentary majority of the Fidesz party and came into force in Hungary on 1 September 2011.

The tax is an excise levy applied on the salt, sugar and caffeine content of pre-packaged foods for which there are healthy alternatives. Taxed products include sugar-sweetened beverages, energy drinks, confectionery, salted snacks, condiments, stock cubes, flavoured alcohol and fruit jams.

The tax is payable either by:

- the individual or company at the first point of sale of the product in Hungary (wholesale or retail)
- the manufacturer, if the product is manufactured in Hungary, or
- the first domestic seller, in the case of products imported into Hungary. (23)

The tax is payable even if the actual individual or company does not sell the product directly to the final consumer.

Actions taken to win media and public support for the tax after implementation

The national media was initially unsupportive of the initiative and took the side of the industry in arguing that the tax was discriminatory and regressive.

'[...] as far as I remember the media was not supportive... so not.. they didn't support the public health side, you know.'

Source: commentator from the health sector

In response, the Secretary of State and the public health sector more broadly initiated several campaigns and actively engaged with the media to explain the importance of the tax. Several large conferences were also organised to explain the tax to health professionals and to NGOs to garner their support.

'So all of them knew that it's a big problem [...] So I mean the harmful ingredients of these foods and the nutritional habits of the population, which contribute to the public health statistics of the Hungarian population. On the other side, they would like to have much, much higher salary, so I think the health professionals were supportive. Some NGOs were also supportive.

'Well, for example, an NGO which was the NGO for consumer protection and then at a later... not from the beginning, but later, the NGO, the Hungarian Dietetic Association... well, mainly this [sic] conferences were organised by the governmental institutions, but everybody was invited who could come, even the food industry. We went everywhere if the food industry asked to give a presentation, or asking [sic] to negotiate this problem and if there was discussion in the ministry. A small group discussion in the ministry on the initiative of the food industry.'

The introduction of the tax led to immediate increases in price of the targeted food products. Prices rose by an average of 29%.⁽⁹⁾ The Ministry of Health and other supporters were able to defend the tax in the media by arguing that the foods affected by it were not essential to the diet or to health.

'Well, you know, immediately after the introduction of the tax you could feel that the price of these goods became higher and higher. So it was not... well the population was not happy on that. That was the reason we always communicate in the media, all of the governmental and public health actors, [...] that these food categories are not staple foods. [...] So it's also a very important part of the Tax Act that the [...] food categories which are under the taxation are not core foods. [...] They don't have any ingredients which will miss nutrition from your diet, so you don't need those snacks.'

Evaluation

The first impact assessment was conducted by the National Institute for Health Development in 2012.⁽⁹⁾ The aims of the study were to identify any changes in the consumption and attitude of the population, any changes in tax revenues, and to assess the economic impact of the tax on producers and manufacturers.

A second impact assessment was conducted by the National Institute for Food and Nutrition Science in 2014. The objectives were to assess whether the changes in consumption of taxed products reported in 2012 had been sustained, to study how consumption had changed in low-income population groups and among groups with diet-related health risks, and to determine the economic consequences of the tax.

In the second assessment, the height, weight and waist circumference of respondents to the National Diet and Nutritional Status Survey were measured. This provided an object measure of the nutritional status of the adult Hungarian population and provided an estimate of the prevalence of obesity and overweight. The respondents' intake of nutrients and patterns of food consumption were recorded using food diaries. Data on the revenue collected from the tax was provided by the National Tax and Customs Administration of Hungary.

Outcomes

Reformulation

The first impact assessment⁽⁹⁾ showed that following the introduction of the product tax, approximately 40% of unhealthy food product manufacturers changed their product formulas to either reduce or eliminate unhealthy ingredients (28% and 12%, respectively). This reduced the population's access to unhealthy ingredients but would have had the concomitant effect of lowering the tax revenue. ⁽⁹⁾ Manufacturer sales of taxable products fell by an average of 27%. ⁽⁹⁾

'So I was always very jealous for [sic] the UK when I followed the literature how successful the voluntary reformulation [sic]in your country. I tried to introduce [...] these results to the food industry but well, it was another reason to have the Act for reformulation. It was very clear that after the Act came into force the reformulation process really was... the speed of reformulation process was much higher. Something else... so you could feel that something happened.

'So what happened... but for example, it was very interesting that the soft drink industry responded very, very quick. So one year later or one and a half year later most of the soft drinks, the sugar content of most of the soft drinks went below 8 grams per 100 millilitres. So it was easy for them. Although the average sugar content of these soft drinks was more than 10 or 11 prior to the introduction of taxation. So it was not a very complicated thing.'

Source: commentator from the health sector

Consumption of taxed products fell among consumers

Consumers responded to the tax in a variety of positive ways. These included:

- choosing a cheaper, often healthier product
- consuming less of the taxed product
- changing to another brand of the product
- substituting some other food (often a healthier alternative).

Most of the people who had reduced their consumption after the introduction of the tax reported that they consumed less in 2014 than in previous years, suggesting that the reduction in unhealthy food consumption was sustained. (11)

'Well, based on the two impact assessments [...] it appeared that the public health product tax has had a long-term impact. [...] Yeah, you know, if you go into details of the publication of the second impact assessment you could see that the ratio of the people who said that they consume less soft drink for example, than before the initiation of the taxation, increased as compared to the first impact assessment.'

Source: commentator from the health sector

Higher prices were cited as the reason for changing consumption of pre-packaged sweets and salty snacks by 81% of people in 2012 and by 66% and 56%, respectively, in 2014. Those who reduced their consumption were two or three times more aware that the product was unhealthy. (11)

'So that's what I can say, that the health literacy of consumers... has improved. We investigated also the substitutions because the food industry, one of their objections was that the people would substitute, the tax and more expensive products, by cheaper lower nutritional and quality

products, you know. That was the reason we tried to investigate also the substitution. It appeared that most of the people who made substitutions choose healthier alternatives, to not bad... not have food that is bad nutritional construction, bad nutritional composition.'

Source: commentator from the health sector

Lower socioeconomic groups chose cheaper products

In the assessment, education was chosen as an internationally-recognised proxy for socioeconomic status which the researchers had comprehensive data on. Furthermore, in Hungary, education accounts for most income inequality. (11)

The assessment found that only 72% of adults with primary education knew about the introduction of the product tax, compared with 93% of people with secondary education and 97% with higher education. However, a greater proportion of adults with primary education than those with a higher educational level chose cheaper products after the tax was introduced. The price increase was most commonly stated as the reason for reduced consumption by people with primary education, but up to one-fifth of people with primary education said they reduced their consumption of a product because they had learnt it was unhealthy. (11)

'It was also interesting that depending on the product category, so whether we are speaking about an energy drink or sweets or others, zero to 10% of people with a lower level of education, so I mean a low socioeconomic status, reduced their consumption because they learned that the product was unhealthy. So it means... so you can conclude that you should do stronger or supplementary public health measures targeting the people with a lower level of education.

'[The industry] said that taxation is regressive, you know, [...] that was the reason that we involved in the impact assessment, the socioeconomic issue, you know. It appeared that... well it's true that the tax is regressive but the public health effects is progress, you know.'

Source: commentator from the health sector

The overweight and obese were more likely to reduce consumption of taxed products

Overweight and obese adults in Hungary were more likely to reduce their consumption following introduction of the tax than people who were of normal weight or underweight.⁽¹¹⁾

'It means that [...] because we had measured data on the population weight and height and because [...] a part of the second impact assessment of taxation was a part of the national representative, nutritional status survey, therefore if we could combine the data of their habits, the change of habits of the consuming tax products to their weight, you know, it appeared that the obese or overweight people had a higher chance to decrease their consumption of taxed products, especially for example, soft drinks.'

Source: commentator from the health sector

The salaries of health sector workers increased

In the first four years since its introduction, the tax generated HUF 61.3 billion (about US\$219 million) for public health spending. In 2013, this amounted to roughly 1.2% of government health expenditure in Hungary. The tax made it possible to increase the wages of 95,000 health sector workers and, in combination with other policies, contributed to a growth in the health workforce since 2011 and to fewer doctors leaving Hungary. Hungary.

'So I think finally it became a win-win situation because as you probably know, based on the two impact assessments, it appeared that the Ministry of Health, so the government, [...]. created an answer to handling the low... very, very low wage of the health care providers. And on the other side, there was some changes in the behaviour of the Hungarian population as [sic] regard to nutrition.'

Source: commentator from the health sector

Using the public health product tax to fund health promotion

In December 2015, the Hungarian Parliament adopted a bill to amend the public health product tax. From 1 January 2016, companies subject to the public health product tax were able to deduct up to 10% of their tax liability to finance 'health promotion programmes' such as activities aimed at promoting a healthy diet and lifestyle, and encouraging participation in sports. (24) Initially, the health promotion programmes had to be made available to people free of charge but the Act was further amended during 2016 so that the public could be charged to participate in activities. It was further amended in 2017 to allow companies to donate part of their tax liability (capped at 10%) to a health care provider to fund health promotion activities.

Lessons learned

The lessons learned based on the success of the initiative include:

Strong leadership

As outlined in this case study, the Fidesz government was strongly in favour of new taxes as a means to tackle the economic crisis it inherited in 2010, and also to reduce the influence of foreign-owned companies. In proposing the public health product tax, the Ministry of Health was working with the grain of government policy. The government stood by its proposals for the public health product tax and faced down a challenge from the European Commission, successfully arguing that the tax was a proportionate measure and did not discriminate against any particular element of the food industry. 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 media, fuelled by the food industry's opposition.

Good baseline data

In formulating the tax, the working group had ready access to longitudinal data about the levels of consumption of different foods by the population. Alongside this, the National Institute for Food and Nutrition Science undertook detailed research into the composition of food and drink products.

'I think it was very, very important during the negotiations with the industry that we had objective data about the consumption of these kind of foods by the Hungarian population and about the composition of these foods. So I think it was very important.'

Source: commentator from the health sector

A clear rationale underpinning the products that were taxed

The success of the tax has been attributed in part to its application to a well-defined set of food items. These were targeted for their unequivocally negative impact on public health, which provided a strong justification for the intervention and contributed to its acceptability. (17)

'It would be much easier for example when there is an accepted... EU-wide profiling system, you know. [...] in this case it would be much easier to find appropriate thresholds in different food categories. We tried to find... the threshold based on the health risk of that certain product, I mean based on the nutritional surveys. Are they consumed by a lot of part of the population or it's a tough problem because... well it contains a lot... a high level of salt but it is not consumed and so on.

'So based on the results, based on the laboratory assessments, so based on the composition of these kind of foods, based on the notion of public health risk, and based on the international literature [...] I think Hungary did a very important activity, almost starting the taxation in a complex way and proving that it was a part of a nutritional package.'

Source: commentator from the health sector

Continuous monitoring

A strength of the initiative in Hungary has been the commitment to monitor the impact of the public health product tax on consumer behaviour, the food industry's behaviour, and on the economy over time. Such a complex longitudinal evaluation based on real data is uncommon and for that reason,

the WHO Regional Office for Europe has provided financial support so that important findings could be shared across Europe and the world.

'Another interesting, so called take home message or [...] the Act was introduced six years ago, but during this time there was a continuous monitoring of the impact of the Act, so it means that laboratory analysis of targeted products. [...] so it's important to monitor the effect and to make amendments if it is necessary. But it's possible only if you have results. What happened to the effect of the taxation, so it's important. [...] So I think it must be continued, it must be monitored and evaluated and we will see how the results behave. Because I think it would be important to prove that even the non-communicable disease [NCD] data, the NCD statistics of the Hungarian population is better.'

Source: commentator from the health sector

Legislation is more effective than voluntary initiatives

Following the success of the public health product tax, two further food industry regulations were introduced. From 18 February 2014, manufacturers were banned from producing food products containing more than 2% of trans fat within the total fat content. Secondly, regulations came into effect in January 2015 requiring that the food and drink offered at public canteens met certain health requirements. For example, sugared soft drinks and high fat meat were prohibited and salt and sugar could no longer be provided on the tables. (20)

'We had I think another very successful legislation regarding the trans fatty acid ban, you know, we introduced in 2013, the trans fatty acid ban. [...] The reason behind it was very similar and the monitoring the result of this and other legislation it seems to be successful you know. You know, it seems that in Hungary we don't have a tradition for successful voluntary initiatives. So it seems that legislations [...] well it works better than voluntary initiatives.'

Source: commentator from the health sector

The lessons learned based on what was less successful include:

The need for an EU nutrient profile model

Hungarian officials spent considerable time and effort identifying which products to include in the tax because they did not have access to a nutrient profile model and agreed nutrient thresholds. If the EU was to develop such a model for classifying food and beverages according to their nutrient profile, this would make the implementation of policies to target unhealthy foods (eg taxation or restrictions on marketing) much easier within countries and could also help to standardise the process across the EU.

The industry is one step ahead

Since coming into effect, the public health product 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 ingredients, so as to reduce their tax burden. (17)

'But to tell the truth from 2011 until now there were five amendments in the legislation [...] Three affected the energy drink market, because they tried to do everything to escape from the effect of the taxation. They reformulated their products but after the end of the reformulation they remained as unhealthy as they were before. So that's the reason we have to change... to

refining the Act to involve also the energy drink market. Just a small example. [...] It's very difficult to compete with the food industry, you know.

'Even now, the food industry has several objections in every negotiation with the Ministry of Health. They said that... so they don't want to accept this Act and every year several times, they write a letter to the government, to cut... to withdraw the tax regulation [...] Even today especially snack associations.'

Source: commentator from the health sector

The need for additional activities to increase the tax's impact

Based on the findings of the impact assessments, the authors made the following recommendations to increase the effectiveness of the tax in future ⁽¹¹⁾:

- the use of targeted health communication and educational programmes to extend the impact of the food tax to other population groups, especially those with lower educational levels
- the introduction of price subsidies for healthy food products, such as fruits and vegetables
- an increase in the level of tax on certain products, including sugar-sweetened soft drinks, and the use of the additional revenue to fund public health programmes, targeted health communications and further nutrition-related interventions.

'Well I think that in connection with this second impact assessment, we have several recommendations. [...] It's also important not to give up monitoring and evaluation, so it should be continued. Well, you know, it's... the level of taxation could be higher in the case of some products. But I think that is a complex issue.'

Implications for the UK

Historically, the UK has had greater success than Hungary with the use of voluntary reformulation initiatives, as evidenced by the actions of the food industry to reduce the salt content of processed foods. However, progress with the voluntary reformulation of foodstuffs with a high added sugar content has been negligible and several NGOs have called for the introduction of a tax on sugar-sweetened beverages. In 2014, the Chief Medical Officer for England suggested that a tax might be necessary if the food industry failed to reformulate the soft drinks market.⁽²⁷⁾ In March 2016, the UK government announced plans for UK-wide industry levy on sugar-sweetened beverages as part of its annual budget. The levy came into effect in April 2018.

As evidenced by this case, the implications for the UK in terms of introducing food taxes are:

- 1. The need for broad political support. Successful implementation in Hungary was largely down to the absolute parliamentary majority of the Fidesz party, which favoured taxation and meant the Bill passed almost unchallenged. In the UK, where government majorities are much slimmer, it would take significant cross-party working to achieve a parliamentary consensus for a controversial initiative such as a food product tax.
- 2. The need to develop public support. Whilst studies have generally suggested that public support for health taxes is higher when a commitment is made to hypothecate the revenue for specific health activities, (28) recent insight from the UK suggests that the public is not yet unanimous in its support of food taxes to fund health initiatives. (27) As outlined above, commentators in Hungary have recently proposed the introduction of other public health initiatives to help consumers see the public health product tax as one of a number of initiatives aimed at supporting healthier choices. Suggested measures include the subsidy of healthier foods and beverages, consumer education, improved labelling, and restrictions on marketing and promotion practices. (11)
- 3. **Establishing a robust evidence base**. The Hungarian public health product tax was underpinned by strong data about consumer behaviour and about the composition of processed food and drink products. This was combined with evidence about the impact of different nutrients on health outcomes to arrive at the final scope of the tax. This level of consideration proved invaluable in Hungary in countering the arguments of the food industry and persuading the European Commission that the tax was proportionate.
- 4. Continued monitoring. As evidenced in Hungary, the food industry will adopt a variety of tactics in order to avoid paying a tax on their products. Putting in place the mechanisms to constantly monitor the formulation of targeted products enables any legislative loopholes to be spotted and closed. Further, it is important to recognise and champion examples where positive reformulation has occurred.
- 5. **Type of tax.** Ingredient-based taxes create an incentive for producers to reformulate products. (27) This was evidenced in Hungary, which opted for an ingredient-based tax and saw quite rapid movement on the part of the food industry to reformulate products.

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