

SHORT AND SWEET: WHY THE GOVERNMENT SHOULD INTRODUCE A SUGARY DRINKS TAX

EXECUTIVE SUMMARY

Obesity is the biggest single preventable cause of cancer after smoking. It could cause ten types of cancer, including two of the most common – bowel and breast – and two of the hardest to treat – pancreatic and oesophageal. If current trends were to continue, obesity could cause almost 670,000 new cases of cancer over the next twenty years¹. The total economic loss from obesity to the UK was calculated at £49 billion in 2012².

KEY FINDINGS

- The introduction of a 20% excise tax on sugar-sweetened beverages could avoid 3.7 million people being obese by 2025. This is equivalent to a 5% shift in obesity prevalence.
- If current trends were to continue, obesity³ levels in the UK could increase from 29% in 2015 to 34% by 2025. This increase could be avoided by the introduction of a 20% excise tax on sugar-sweetened beverages.
- The introduction of a 20% excise tax on sugar-sweetened beverages could save approximately £10 million⁴ in direct NHS healthcare and NHS social care costs in the year 2025 alone.

WHAT THE GOVERNMENT SHOULD DO

- An excise tax on sugar-sweetened beverages should be introduced as part of a comprehensive children's obesity strategy.

WHY TAX SUGARY DRINKS IN THE UK?

New national public health recommendations have halved the maximum recommended limit for sugar intake for children and adults. They also recommend that consumption of sugary drinks should be 'minimised' in children and adults. The recommendation is based

on evidence which indicates that consumption of sugary drinks results in greater weight gain and increases in body mass index (BMI).

Currently, 11-18 year-olds consume three times more sugar than the new recommendations. Sugary drinks are their single biggest source of added sugar, making up 30% of their total intake. In response to this problem, Public Health England have identified a tax on sugary drinks as one of a collection of measures that could help achieve a reduction in sugar consumption in the UK^{5,6}. This measure is also backed by the majority of the public, with 55% supporting a tax on sugary drinks and only 36% opposed to the measure⁷.

FIGURE 1: PUBLIC BACKS ACTION TO TACKLE OBESITY: FEBRUARY 2016

PUBLIC BACKS ACTION TO TACKLE OBESITY

Q Would you support or oppose introducing a tax on drinks with added sugar?



Source: YouGov survey, sample size of 1,774 UK adults
LET'S BEAT CANCER SOONER.
cruk.org

UNHEALTHY DIETS ARE A MARKET FAILURE

The World Health Organization acknowledges that increases in the amount of calories consumed alone, rather than a lack of physical activity, is sufficient to explain increases in body weight, particularly in high-income countries⁸. Taxes have been increasingly used in

recent years to promote healthier diets. Finland, France, Hungary and Mexico have all introduced food-related taxes including taxes on sugary drinks as demonstrated in Table 1.

A study prepared for the EU Commission's DG Enterprise and Industry found that, in general, food taxes achieve a reduction in the consumption of the taxed product, and can also encourage manufacturers to reduce levels of specific nutrients such as sugar or fat in the taxed product⁹. In addition, modelling studies^{10,11} and reviews of real world implementation¹² have demonstrated the efficacy of taxes in reducing sales and consumption of sugary drinks. For example, in Mexico an excise tax of 0.04p per litre has led to a 12% reduction in sugary drinks purchases¹³.

TABLE 1: SUGARY DRINKS TAXES IMPLEMENTED AROUND THE WORLD

COUNTRY	MECHANISM	RATIONALE	REVENUE COLLECTION	IMPACT ON SALES OR CONSUMPTION
FINLAND	Excise tax on non-alcoholic beverages (£0.08 per litre) and beverages containing >0.5% sugar (£0.15)	Primarily to raise revenues	£144 million in 2013	No formal evaluation. Unofficial reports suggest tax has led to decreased sales and consumption.
HUNGARY	Sales tax on syrups or concentrates for SSBs (~£0.5 per litre) and other SSBs (~£0.02 per litre)	To promote public health and raise revenues for health care	£42.9* million in 2013	Formal evaluation in 2013 indicated a reduction in consumption of taxed products, some reformulation and decrease in consumption of nutrients of public health concern
FRANCE	Tax levied on French manufacturers, importers and food outlets at ~£0.06 per litre for drinks containing added sugar or added sweeteners	Primarily to raise revenues, but aligned with national strategy to reduce overweight and obesity among children and adolescents	Approximately £268 million since 2012	An immediate drop in sales was recorded on introduction of the tax, after years of increasing sales
MEXICO	Excise tax on SSBs at £0.04 per litre	To promote anti-obesity measures and provide free drinking water in schools	£745 million in 2014	Formal evaluation shows reduction in sales of 12%

Source: Adapted from Cornelsen and Carreido, Food Research Collaboration 2015, and Colchero et al. 2016.

* Including other discrete product categories such as energy drinks and confectionery.

IMPACT OF AN SSB TAX ON FUTURE BMI PREVALENCE

Table 2 presents the predicted prevalence of healthy weight, overweight and obesity, both if current trends were to continue (the 'baseline') and after introducing a 20% excise tax on sugar sweetened beverages. Obesity levels are estimated to reach 29% in 2025 following the introduction of this tax compared to 34% if a tax was not introduced. This translates to 3.7 million fewer obese people by 2025. The proportion of people who are a healthy weight would also increase from 31% in 2015 to 35% in 2025 after introducing the tax.

TABLE 2: PREVALENCE OF BMI GROUPS BY BASELINE AND AS A RESULT OF AN SSB TAX (ADULTS AGED 18-100)

SCENARIO	MALE			FEMALE			BOTH		
BASELINE	BMI <25	BMI 25-29.9	BMI ≥30	BMI <25	BMI 25-29.9	BMI ≥30	BMI <25	BMI 25-29.9	BMI ≥30
2025	26.7	39.6	33.6	35.1	30.9	34.0	31.0	35.2	33.8
SSB TAX	BMI <25	BMI 25-29.9	BMI ≥30	BMI <25	BMI 25-29.9	BMI ≥30	BMI <25	BMI 25-29.9	BMI ≥30
2025	30.2	42.2	27.6	39.1	31.6	29.3	34.7	36.8	28.5

IMPACT ON DIRECT NHS COSTS AND INDIRECT SOCIETAL COSTS

The introduction of a sugary drinks tax is projected to result in the avoidance of £10 million/year in direct NHS healthcare and NHS social care costs in the year 2025 alone.

THE ANALYSIS

Cancer Research UK commissioned the UK Health Forum to assess the impact of a sugary drinks tax on future rates of overweight and obesity. Using the modelling process developed by the UK Foresight working group¹⁴, the UK Health Forum examined the impact a 20% excise tax on sugar-sweetened beverages would have on rates of overweight and obesity in the UK over the next 10 years. Further details on the model and the input data that were used to determine the body mass index (BMI) reductions are detailed in the technical annex¹⁵.

AUTHORS AND INFORMATION

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ABOUT CANCER RESEARCH UK

Cancer Research UK is the world's largest independent cancer charity dedicated to saving lives through research. We support research into all aspects of cancer through the work of over 4,000 scientists, doctors and nurses. In 2014/15, we spent £434 million on research institutes, hospitals and universities across the UK – including a £41 million contribution we made to the Francis Crick Institute. We receive no funding from the Government for our research. Cancer Research UK is a registered charity in England and Wales (1089464), Scotland (SC041666) and the Isle of Man (1103).

ABOUT THE UK HEALTH FORUM

The UK Health Forum is a charitable alliance of professional and public interest organisations working to reduce the risk of avoidable non-communicable diseases (NCDs) by developing evidence-based public health policy and supporting its implementation through advocacy and information. Working with and through our members, we are a centre of expertise in policy research and development, epidemiological and economic modelling of NCDs, and information provision. UK Health Forum is a registered charity (803286).

REFERENCES AND ENDNOTES

¹ Cancer Research UK and UK Health Forum. (2016). 'Tipping The Scales: Why Preventing Obesity Makes Economic Sense'. ([pdf](#))

² McKinsey Global Institute. (2014). 'Overcoming Obesity: An Initial Economic Analysis'. ([website](#))

³ Obesity is classified as a Body Mass Index (BMI) of 30 or above in this report. BMI is a measure of whether a person is a healthy weight for their height, calculated by dividing weight in kilograms (kg) by height in metres (m), then dividing the answer by height in metres again. Whilst BMI is not a perfect measure for all individuals, it is the most widely used population measure for weight classification.

⁴ This figure is derived from the effect the tax has across all BMI groups. The definitions of overweight and obesity are outlined in the methodology.

⁵ Public Health England. (2014). 'Sugar Reduction: Responding to the challenge'. ([pdf](#))

⁶ Public Health England. (2015). 'Sugar Reduction: The evidence for action'. ([pdf](#))

⁷ Cancer Research UK and YouGov. (2016). 'Public back ban on children's junk food advertising'. ([website](#))

⁸ Vandevijvere, S., et al. (2015). 'Increased food energy supply as a major driver of the obesity epidemic: a global analysis'. Bulletin of the World Health Organisation. 93:446-456. ([pdf](#))

⁹ ECORYS. (2014). 'Food taxes and their impact on competitiveness in the agri-food sector'. ([website](#))

¹⁰ Briggs, A., et al. (2013). 'Overall and income specific effect on prevalence of overweight and obesity of 20% sugar sweetened drink tax in UK: econometric and comparative risk assessment modelling study'. BMJ. 347:f6189

¹¹ Collins, B., Capewell, S., O'Flaherty, M., Timpson, H., Razzaq, A., Cheater, S., et al. (2015). 'Modelling the Health Impact of an English Sugary Drinks Duty at National and Local Levels'. PLoS ONE 10(6): e0130770. ([pdf](#))

¹² Cornelson, L., and Carriedo, A. (2015). 'Health related taxes on food and beverages'. Food Research Collaboration. ([pdf](#))

¹³ Colchero, M., et al. (2016). 'Beverage purchases from stores in Mexico under the excise tax on sugar sweetened beverages: observational study'. BMJ 2016; 352:h6704. ([pdf](#))

¹⁴ Government Office for Science. (2007). 'Tackling Obesity: Future Choices – Modelling future trends in Obesity and the impact on Health'. ([pdf](#))

¹⁵ Available at the UK Health Forum. ([website](#))

FEBRUARY 2016