

### February 2020

# UK tax on sugar-sweetened beverages accelerated reductions in overall sugar content

Researchers from the University of Oxford found reductions in the amount of sugar in sugar-sweetened beverages (SSBs) available in the United Kingdom between 2015 and 2018, a period that saw the implementation of a tiered levy on sugar content as well as changes in consumer choice and reformulation efforts by the beverage industry. The results were published in *BMC Medicine* in January of 2020.

Sugary beverages represent a major contributor to extremely high consumption of free (added) sugars in the United Kingdom. In response to heightened awareness of the threat of sugar-linked diseases such as diabetes and obesity, in 2016 the UK government announced a three-tiered levy based on the sugar content of beverages, and in 2018 they enacted the Soft Drink Industry Levy (SDIL) designed to incentivize reformulation. Beverages containing more than 8 grams of sugar per 100 ml ("high-sugar") were taxed at 24 pence per liter and those containing 5-8 grams per 100 ml ("mid-sugar") were taxed at 18 pence per liter. Products with less than 5 grams of sugar per 100 ml ("low or zero-sugar") and unsweetened fruit juices and flavored milk drinks were exempt from the tax.

This study paired brand-level sales data with sugar content data to determine the volume of sugar sales from sugary beverages on over 7,000 beverages in the UK from 2015 to 2018. Products were categorized by sugar content within the tax tiers. Sales of bottled water as well as beverages exempt from the tax were also included in the analysis.

Despite a 5% rise in total beverage sales between 2015 and 2018, the study found major reductions in the total volume of sugar in beverages purchased per capita per day, as well as the mean sugar content per beverage, stemming heavily from reformulation in products to reduce sugar content. At the same time, sales of low- or zero-sugar beverages increased significantly. These outcomes underscore the success of the tax and public health efforts to pressure beverage companies to reduce sugar content.

#### **Key Findings**

- The volume of sugar from soft drink purchases in the UK fell by 30% (4.6 grams per capita per day) between 2015 and 2018.
- Volume sales of beverages taxable under the SDIL decreased by 50% between 2015 and 2018. Volume sales of low- and zero-sugar (< 5 g/100 ml) beverages saw a 40% increase.
- Six of the top ten beverage companies based on sales in 2015 reformulated or removed over half of the high- or midsugar products in their portfolios.
- The annual reduction in beverages' sugar volume was more profound in data collected after the 2016 announcement of the tax, with the greatest decrease in 2017 2018, the year the levy was implemented.

## **Key Messages**

- Public health efforts highlighting the negative impacts of sugar overconsumption are effective in driving policy change and influencing consumer behavior.
- Taxing beverages with especially high levels of sugar at a higher rate can influence sugar reductions in even the most popular products, illustrating the impact of such tiered taxes.

#### **Full Citation**

Bandy, L.K., Scarborough, P., Harrington, R.A. et al. (2020) Reductions in sugar sales from soft drinks in the UK from 2015 to 2018. *BMC Med* 18, 20. doi:10.1186/s12916-019-1477-4

Funding for this study was provided by the University of Oxford's Nuffield Department of Population Health, the British Heart Foundation, the National Institute for Health Research and the Oxford Health NHS Foundation Trust.

A link to the text online can be found at  $\underline{\text{https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-019-1477-4}}$ 

**Additional Resources:** *BMC Medicine* is an open access, open peer-reviewed general medical journal publishing research in all areas of clinical practice, translational medicine, medical and health advances, public health, global health, policy, and general topics of interest to the biomedical and sociomedical professional communities.