Correction to: Changes in soft drinks purchased by British households associated with the UK soft drinks industry levy: controlled interrupted time series analysis; BMJ (2021)

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This paper was published in The BMJ on 10 March 2021 and described changes in soft drink purchases by British households associated with the UK Soft Drinks Industry Levy (SDIL) one year after implementation. It reported that at 1 year post implementation, the levy was associated with a reduction in household purchasing of sugar from all soft drinks combined of 30g (or 10%) per household per week; and no change in volume of all soft drinks purchased.

During subsequent analysis, we identified that the analysis presented in the original paper contained an error. During preparation for the original analysis, a weighting variable was incorrectly calculated. This variable was also redundant to the analysis replicating a second weighting variable.

The authors alerted The BMJ to this error. The BMJ have now retracted the original paper and published a corrected version in BMJ Open.

The corrected version replicates the original analysis without the redundant and incorrectly calculated weighting variable.

Most of the results in the paper are impacted by the correction – some by a negligible amount, others more substantively. Overall, the estimate of change in purchasing of sugar from all soft drinks combined at 1 year post implementation of the levy reduces from -30g (or -10%) per household per week to -8g (or -3%) per household per week. Alongside, the estimate of change in volume of soft drinks purchases increased from no change to a 189ml (or 3%) increase per household per week.

Nevertheless, the authors believe that the results still have important public health implications. The findings indicate that the SDIL may have had a public health benefit (by reducing household purchasing of sugar from soft drinks) without harming, and indeed potentially benefiting, industry (by increasing total volume of soft drinks purchased).

Our wider evaluation has also reported that the SDIL was associated with:

- · Limited and short-lived impacts on <u>stock market value</u> of UK-operating soft drinks companies listed on the London Stock Exchange
- · A short-term negative impact on the <u>domestic turnover</u> of UK soft drinks manufacturers that did not continue post-implementation
- · Reductions in <u>sugar concentration</u> of soft drinks
- · Decreased <u>prevalence of obesity</u> in year 6 girls, with the greatest differences in those living in the most deprived areas

- Reductions in incidence rates of childhood hospital admissions for <u>carious tooth extractions</u> across most areas regardless of deprivation status and especially in younger children.
- · Acceptance from <u>senior food & drink industry professionals</u> and indications that impacts may extend beyond soft drinks, but frustration that legislation did not adequately reflect the complexity of the sector
- · Changing <u>industry reactions reported in the media</u> over time from initial strong opposition to later adaptation and focus on maximising perceived profitability
- · Understanding by <u>UK adolescents</u> of the negative consequences of excess sugar and SSB consumption and acceptance of interventions that require little effort from them to benefit
- <u>High support among UK adults</u> that did not change between 4 months before implementation and 8 or 20 months after

We also have a number of further papers under review and currently only available in pre-print form which have not yet been through peer review. These indicate that the SDIL was associated with:

- · Sustained reductions in sugar derived from soft drink purchases 2y following implementation, with the greatest effects in low-income households and those with children
- · Reductions in incidence rates of childhood hospital admissions for <u>asthma</u> across all age and deprivation groups
- · Reductions in <u>dietary free sugar consumption</u> in children and adults, as reported in the National Diet & Nutrition Survey
- · Meaningful improvements in <u>population health</u> and reductions in health sector spending, from modelling analyses