

DAVID FISHER



Sugar tax could sweeten a market failure

Britain has announced a tax on sugary drinks. Countries should go further and target foods that have large carbon footprints, says Adam Briggs.

Health campaigners and political observers got a surprise in the United Kingdom's latest budget. This month, Chancellor of the Exchequer George Osborne announced a sugar tax in the form of a levy on sugary-drinks manufacturers.

This is a bold and welcome move from a Conservative government that has often been criticized for not standing up to industry. It demonstrates that officials and policymakers have heeded advice and now recognize that sugar is a public-health problem that needs legislative control. The tax has potential implications not just for public health and the global soft-drinks industry, but also for the ability of all governments to act on market failures in food.

Britain will not be the first place to introduce a sugar-drink tax. Mexico, France, Hungary and Finland, among others, have taxed sugary drinks; South Africa, the Philippines, Indonesia and India are considering doing so. Hungary and Finland have also taxed some unhealthy foods.

Scientists, campaigners and policymakers around the world will watch the reaction of both the British public and soft-drinks companies to the tax with interest (there are already reports of potential legal challenges). Britain has a reputation as an international leader in working with industry to reduce salt in food through reformulation, and the government's latest policy is designed to force soft-drinks manufacturers to do the same.

The risks to health from sugar have become apparent in recent years. There is growing evidence that it causes tooth decay, diabetes and heart disease, and it has been implicated as a leading cause of the global obesity epidemic. Public-health campaigners around the world have targeted soft drinks as a focus of their attention. And with good reason: sugary drinks directly harm health, they have no beneficial nutrients, healthier substitutes are available, and they can be neatly defined by legislators.

The UK policy is an example of taxes being used to correct a negative externality: that is, a market failure in which the full cost of a product to individuals and society is not included in the price. Adverse health outcomes that arise from drinking soft drinks are a prime example.

Mexico's law (and a similar model used in Berkeley, California) also tries to correct this negative externality. The taxes there are not explicitly designed to raise revenue, but instead to shift behaviour and improve public health. An analysis of the Mexican tax in *The BMJ* suggests that it is working. The study showed that purchases of sugary drinks fell by 12% at the end of the first year after a 10% price rise, with greater declines among those who were less well off (M. A. Colchero *et al. Br. Med. J.* 352, h6704; 2016).

The UK government has a similar goal. The tax is aimed at reducing childhood obesity, and revenue will be allocated to schools to expand

breakfast clubs and increase sport provision.

But Britain is trying to do it slightly differently. Rather than being a sales tax that directly raises the price of sugary drinks (as called for by the public-health community and found in other countries), it is instead a tax levied on the manufacturer. From April 2018, soft-drinks companies will be required to pay 18p (25¢) for every litre of sugary drink with 5–8 grams of sugar per 100 millilitres sold in Britain, and 24p for every litre with more than 8 grams of sugar (2 teaspoons) per 100 millilitres. Coca-Cola contains 10.6 grams of sugar per 100 millilitres.

The fine details will be determined in the coming months, with the timing of the levy's introduction designed to give soft-drink companies enough time to reduce the sugar content of their products and change advertising strategies if they wish. Once introduced, it will then be up to the companies to decide how they change the price of their taxed (and untaxed) products, if at all.

The global implications are significant. If effective, substantial product reformulation to reduce sugar content would be an important public-health victory. It would provide a model for other countries that may be unwilling to implement a tax without giving industry the opportunity to adapt beforehand. Equally, industry may choose to keep the sugar content of its drinks the same and either absorb the tax or pass it onto the consumer across their product ranges. This would mean no relative price increase on sugary drinks and so probably no drop in consumption.

The rising popularity of taxes on unhealthy foods and drinks suggests that a similar intervention is possible for another major negative

externality in food: greenhouse-gas emissions.

Agriculture is responsible for up to 30% of the world's greenhouse-gas emissions, yet is often overlooked in climate discussions and was barely mentioned at December's United Nations climate talks in Paris.

Taxing food that is responsible for high greenhouse-gas emissions when it is produced and transported could benefit the health of both people and the planet. An obvious place to start is red meat, including beef and lamb. Research in our group suggests that a climate tax to address this externality would see its price rise by 5–45%, depending on the cut and quality. Consumption could fall by up to 20%. Along with smaller price changes to other carbon-intensive foods, this could shrink UK emissions by nearly 19 million tonnes of carbon dioxide equivalent per year—about the same as 85,000 Boeing 747 flights between London and New York. Sugar is a good start, but we can aim higher. ■

Adam Briggs is a public-health researcher at the University of Oxford, UK.
e-mail: adam.briggs@dph.ox.ac.uk

REVENUE WILL BE ALLOCATED TO SCHOOLS TO EXPAND BREAKFAST CLUBS AND INCREASE SPORT PROVISION.

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