Will the sugar tax leave a bitter taste?

The introduction of a UK sugar tax may seem a sensible first step in tackling the potentially detrimental effects of sugar consumption on the nation’s health. But will the imminent levy leave a bitter taste if it fails to make a real difference? Is the levy high enough to change corporate and consumer behaviour? And does a focus on sugar go far enough as we struggle to contain the nation’s expanding waistbands? Mark Greener investigates the likely parameters involved.

British children have extraordinarily sweet teeth: between four and 10 years of age they drink the equivalent of almost half a bathtub of sugary drinks each year. Between 11 and 18 years of age, they drink almost the full bathtub each year.1 And that doesn’t include sugar-laden breakfast cereals, sweets and other foods.

Not surprisingly, all that sugar takes a toll on children’s teeth: in 2013, 12% of three-year-old children in England showed obvious dental decay.2 Sugar also fuels obesity, which is the biggest cause of preventable cancer after smoking3 and drives the rise in type 2 diabetes (T2D). So, the introduction of the sugar tax – officially called the Soft Drinks Industry Levy (SDIL) – probably in April next year seems a sensible first step to tackling obesity. After all, a five-year-old child should have no more than 19g of sugar a day. A typical can of cola might contain 35g of sugar.4

The levy will have two levels: 5–8g and 8g or more sugar per 100ml – above about 5% and 8% sugar respectively. The government expects the levy to raise £520 million in the first year. Based on this, the Office for Budget Responsibility estimated implied rates of 18p and 24p per litre for the lower and upper bracket respectively.5 ‘We live in an environment where it is often difficult to make healthy choices. The SDIL is a bold, ambitious step that should help reduce the rates of obesity and T2D,’ says Pav Kalsi, a senior clinical advisor at Diabetes UK.

Ill-thought out?

The SDIL aims to encourage producers and importers of sugary soft drinks to add less sugar, promote diet drinks and reduce portion sizes. Cancer Research UK, for example, suggests that a 20p per litre tax could avoid 3.7 million cases of obesity by 2025 – a 5% ‘shift in obesity prevalence’.1,3

However, some experts remain sceptical that the levy is high or broad enough to significantly reduce sugar consumption. ‘At this level, the levy might result in a small dip in consumption. But it probably won’t be great and we don’t know if it’ll be sustained,’ says James Brown, Lecturer in Biology and Biomedical Science in the School of Life and Health Sciences at Aston University. ‘Indeed, there’s not a lot of evidence to support a sugar levy and the legislation is not that well-thought through. I suspect that the levy was framed with one eye on capturing the headlines.’

Dr Brown points out, for example, that pure fruit juices typically contain between 18% and 24% sugar. But this derives from fructose and not added sugar. So, pure fruit juices, along with milk-based drinks, will not be subject to the levy.4 ‘People might switch from sugary soft drinks to fruit juices, milk or other sources of sugar,’ he notes. ‘So, the effect on total sugar consumption might be less than hoped. In addition to containing a lot of sugar, fruit drinks are acidic, which makes them especially harmful to teeth.’ (Demineralisation of teeth occurs once saliva falls below about pH 5.5.)6 ‘Why the levy doesn’t apply to high-sugar fruit juices isn’t clear,’ Dr Brown says.

Indeed, the extent to which the levy will reduce sugar consumption is a moot point. A Mexican excise tax on sugary drinks introduced on 1 January 2014 is equivalent to about one peso (approximately 4p) per litre.7 But opinions are divided about the levy’s success. ‘There is lots of evidence from around the world that show sugar taxes, when done well, do work. Mexico implemented a 10% tax on sugary drinks,’ Ms Kalsi says. ‘Consumption fell by 12% overall and by 17% in the lowest income groups within a year.’ In contrast, a report commissioned by the British Soft Drinks Association notes that daily intake fell by an average of six calories per person after the tax’s introduction.8

In the UK, ‘detailed economic modelling’ suggests that the levy can be expected to reduce the volume of soft drinks sold by 1.6% or 0.4% if some consumers switch to milk. The changes in sales and consumption could translate into an average reduction of just five calories per person a day largely because many consumers will switch to fruit juices and milk.9

Removing the value incentive

So, is the levy high enough to engender a real, sustained shift in consumer behaviour at supermarkets, restaurants and food outlets? Ms Kalsi points out that about 18% of meals were eaten out of the home during the year ending March 2015, a 5% increase on the previous year.9 ‘People tend to make less healthy choices when they eat out,’ she says. Indeed, a new French law means it is illegal to sell unlimited soft drinks at a fixed price or offer unlimited free soft drinks.10

According to Paul Dobson, Professor of Business Strategy and Public Policy at the Norwich Business School, University of East Anglia, the SDIL needs to be high enough to make relative discounts and multi-buy offers uneconomical to retailers. Soft-drink manufacturers do not have to pass the levy on to their customers.4 They can cut the amount of sugar or they can choose to absorb the cost. ‘Manufacturers and retailers can absorb an increase of a few pence,’ he says. ‘The levy needs to be set above that threshold so that the manufacturers and retailers have to pass on the increased costs and cannot cross-subsidise.’

Professor Dobson comments that consumers focus on ‘value’ rather than ‘price’. So, retailers offer multi-buy savings and relative discounts on large quantities. ‘Many retailers deliberately sell larger-size drinks at much lower unit prices than smaller sizes. Indeed, the unit price of a small bottle of soft drink can be more than four times higher than a multi-buy offer on the large-size bottle. This effectively penalises people who choose the smaller

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sizes and means retailers encourage us to over-consume,’ he says. ‘Consumers have a bias to consuming better value products, even when this might be detrimental to their health and wellbeing. We need to make the public aware of the way in which the incentives influence their behaviour.’

As consumers are ‘deal prone’, they face a conflict between their desire for value and their ambition to control consumption of unhealthy foods. Against this background, Professor Dobson and colleagues modelled how retailers might use different sizes of sugary drinks with different relative prices to target different consumer groups. The findings show that the levy needs to be set high enough to ensure that the retailers are discouraged from imposing a surcharge on smaller drink sizes to steer consumers towards consuming excessively through relative discounts and multi-buy offers on large drinks sizes,’ he says. ‘Once you remove the “value incentive” people are more likely to buy based on price and so place health first in their purchasing decision. It is too soon to say if the levy is appropriate, but it might be higher than that proposed by the government.’

Certainly, the levy’s economic and public health impact will need careful monitoring. ‘The current level of the levy seems to be a reasonable starting point,’ says Ms Kalsi. ‘No country has implemented a levy like ours before, so it’s crucial that we evaluate and monitor its impact. We need to be able to see what companies have reformulated, what product switches the public have made and what the impact of reducing the sugar content of sugary drinks has on overall sugar consumption. These data need to be published in a transparent way so we can see the full picture.’

A regressive tax?
The monitoring also needs to ascertain if the levy targets those in most need. Arguably, the levy is potentially a regressive tax: in other words, the levy, assuming it is passed on to the consumer, will take a larger proportion of income from those with low rather than high incomes. This potentially reduces the amount they have to spend on, for example, fruit and vegetables or exercise.

‘Rather than being penalised, the poorest stand to benefit the most,’ Ms Kalsi argues. ‘ Sugary drink consumption levels tend to be highest among the most disadvantaged children who are hit hardest by obesity. For example, the prevalence of obesity in the most deprived 10% of the population is approximately twice that of the least deprived 10%. The health gains from the SDIL will, therefore, be the biggest for people on low incomes. We also don’t know whether the levy will be passed onto consumers yet.’

‘The levy is a completely regressive tax, alongside those on alcohol and tobacco,’ Dr Brown counters. ‘Taxation isn’t the best way to change behaviour among economically deprived people. We could, perhaps, tie improved health behaviours in with benefits, not as a penalty, but as a reward. Economically deprived people need carrots not sticks.’

Instead of a regressive tax, Dr Brown proposes improving education of children and their parents. ‘I would much rather see investment in educating people about food choices, developing their cooking skills and offering nutritional advice,’ he says. ‘Everyone needs to understand their relationship to food and be mindful of the consequences of unhealthy choices. But it’s especially important in poorer communities.’

Dr Brown accepts that transforming the attitudes of more deprived communities could take generations. ‘Most of what you learn about food comes from your parents. So, it’s easy to pass on bad habits to the next generation,’ he says. ‘This means that health and wellbeing should be part of a core national curriculum alongside maths, English and science. If we don’t invest in education, the NHS won’t be able to cope with the rise in the number of cases of diabetes over the next 20 years. Even if we miss this generation of parents, investment in educating children could make a difference in the future.’

In addition, healthy food messages should be promoted along all the channels at a marketer’s disposal. ‘The adverts on television highlighting the importance of “five-a-day” are welcome,’ Dr Brown says.

‘But children aged eight to 16 years don’t engage with television in the same way as their parents. Bloggers, YouTube and other social media channels are far more influential. The Department of Health needs to have a much more coordinated approach to social media.’

Part of a wider approach
Sugar is, of course, only one element in an unhealthy lifestyle that drives obesity. Increasing exercise is also important. Revenue from the levy will help fund programmes that encourage physical activity and balanced diets among school-aged children.4

‘The aim to use the money raised to support exercise in school is laudable. But we should be doing this anyway,’ Dr Brown says. ‘Children need about 2 hours of activity a day: this doesn’t need to be formal PE. Even in Cuba, children get 2 hours exercise a day, running around the playground. In some UK schools, children are lucky to get that in a week.’

Ms Kalsi adds that, in addition to encouraging exercise, additional policies that support the reduction of sugar, saturated fat and salt in our food are needed. ‘Diabetes UK also wants to see our children better protected from junk food marketing by tightening the restrictions around online and non-broadcast advertising and implementing a 9pm watershed ban on TV. None of this is about a “nanny state”,’ Ms Kalsi says. ‘We all have a role to play in making the healthy choice the easy choice, and these are the actions that we need the government to take to protect our children’s future health.’

‘Obesity and diabetes are complex social issues,’ Dr Brown concludes. ‘There’s no magic bullet, no one thing that we can do in isolation that will stop the rise in obesity and diabetes. Cutting sugar in drinks is a valuable first step. But it’s only one piece in a much bigger jigsaw.’

Mark Greener, BSc(Hons), MRSB, Medical Correspondent

References
References are available in Practical Diabetes online at www.practicaldiabetes.com.
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