RECIPE FOR CHANGE

Evidence briefing 1

Health and economic benefits of an upstream sugar and salt levy

This evidence brief describes the potential health and economic gains from implementing an upstream sugar and salt levy, as recommended by the National Food Strategy: The Plan. This draws on research by London School of Hygiene and Tropical Medicine[i].

Headline figures

A levy on all sugar and salt sold used in manufactured foods or in restaurants and catering could:

- Reduce average salt intake by up to **0.9g per day** and sugar intake by up to **15g per day**[ii]
- Increase average life expectancy by up to **4.9 months**
- Prevent almost **2 million cases of chronic disease**, including over **1 million** cases of cardiovascular disease (CVD[1]), **571,000** cases of type 2 diabetes, **11,000** cases of cancer and **249,000** cases of respiratory disease over 25 years
- Provide gains of more than **3.7 million quality adjusted life years**, worth **£77.9 billion** to the economy over 25 years

[1] IHD and stroke

Background

Recipe for Change is a campaign focused on building political and public support for a new fiscal measure on manufacturers that builds on the success of the Soft Drinks Industry Levy (SDIL). A new levy would encourage reformulation of food and drink products to become healthier, help to shift sales towards healthier products and raise money for improving children's health from those products that aren't reformulated. An extension of SDIL was one of the recommendations of the National Food Strategy (NFS), an independent review of the food system and solutions commissioned by the Government[iii].

Reformulation is a public health intervention used in the UK and globally to improve population diet and prevent ill health. It sits within a package of policies designed to support people to opt for healthier foods in the longer term. Reformulation includes reducing salt, sugar, fat or calorie content of products. This is can be achieved by small gradual changes in the recipes and/ or pack or portion sizes. Most people will not notice the changes as palatability will not be affected. Ideally sweetness or saltiness should be gradually reduced and replacers not used.

The SDIL has been an enormous success, reducing sugar content across soft drinks purchased by all socio-economic groups, without leading to a fall in sales. Since its introduction in 2018, this levy has reduced average total sugar content in soft drinks by 46%. It has also reduced household intake of sugar in soft drinks by an average of 10%[iv]. Two thirds (68%) of the public support an expansion of the SDIL[v]. In the UK, food manufacturers have also made some progress with reducing sugar levels in breakfast cereals and yogurts, as well as with salt reduction. Many want to continue making their products healthier but require a level-playing field which can only be created by government intervention. We have an opportunity to build on the success of SDIL and help ensure that healthier options are affordable and accessible for everyone.

What could a new fiscal measure look like?

The Recipe for Change campaign, in collaboration with academic researchers, is exploring two options for a new fiscal measure.

The first policy option draws on the recommendation in the National Food Strategy to apply a levy at a rate of £3/kg on sugar (and some ingredients used for sweetening, but not non-nutritive sweeteners) and £6/kg on salt[ii]. This would be applied to all sugar and salt used in manufactured foods or in restaurants and catering and would therefore impact all manufactured food categories in which sugar or salt is used as an ingredient. An exemption would be applied for sugar and salt that goes straight to retail to avoid taxing ingredients that are used in home cooking.

The second policy option focuses on specific categories of non-staple products, such as confectionery, cakes and other sweet and/ or savoury discretionary products. This option would apply a tax to products within specified categories using either a nutrient-based or other health classification systems.

Here we present the potential health impacts that the first of these two options could have if implemented.

Box 1

How might manufacturers and consumers respond?

As part of the work to develop the tax proposal for the National Food Strategy, a number of different responses by consumers and industry were considered and summarised into four main scenarios by the Institute of Fiscal Studies[ii]

1. The **"Low-Low"** scenario:

   Low industry change (firms reformulate to 30% of government targets), and low consumer change (they substitute away from products by 30% of the price increase)

2. The **"High-No"** scenario:

   High industry change (full reformulation to government targets), but no consumer change (they do not respond to price increases)

3. The **"High-Moderate"** scenario:

   High industry change (full reformulation to government targets), and moderate consumer change (they substitute away from products by 70% of the price increase)

4. The **"High-High"** scenario:

   High industry change (full reformulation to government targets), and high consumer change (they substitute away from products by the same amount as the price increase)

What are the potential reductions in salt and sugar intakes?

The maximum daily recommended intake of free sugars for adults is 30g, with no more than 5% energy from free sugars[vi]. Current intakes are, on average, 55g/day (9.9% energy) for men and 44g/day (9.9% energy) in women, representing more than double the recommendation[vi]. Children also exceed the age-specific recommendations in all age groups[vii]. The daily recommendation for salt is no more than 6g/day in adults. The average intake is 40% higher than this recommendation with intakes of 9.2g/day for men and 7.6g/day for women[viii]. Two thirds (66%) of children exceed age-specific recommendations on salt and 95% exceed recommendations on free sugars.[ix]

The potential sugar and salt reduction from the application of the levy proposed in NFS has previously been calculated, based on different degrees of industry and consumer response (Box 1)[ii]. A reduction in sugar intake of between 4.5g and 12.6g per day (10%-29% reduction) in women and 5.3g and 15.0g (10-27% reduction) in men could be achieved. A reduction in salt intake of between 0.2g and 0.7g per day (3-9% reduction) in women and between 0.3g and 0.9g per day (3-10% reduction) in men could be achieved by introducing the levy. Even with no response from consumers (scenario 2), the reduction of salt and sugar intake per day in women could be 0.6g and 8.3g respectively (8% reduction in salt and 19% reduction in sugar), and in men 0.7g and 9.7g respectively (8% reduction in salt and 18% reduction in sugar). This demonstrates the potential role of a levy to support diets which are lower in salt and sugar, as part of a wider suite of policies focused on improving the food environment.

	Salt	Sugar
Max recommendation	6g	30g
Current average intake 19-64 years (males / females)	9.2g/7.6g	55g/44g
	Change per day	
1 - Low industry - Low consumer scenario (males / females)	-0.3g/-0.2g	-5.3g/-4.5g
2 - High industry - No consumer scenario (males / females)	-0.7g/-0.6g	-9.7g/-8.3g
3 - High industry - Moderate consumer scenario (males / females)	-0.8g/-0.7g	-13.6g/-11.4g
4 - High industry - High consumer scenario (males / females)	-0.9g/-0.7g	-15.0g/-12.6g

Table 1. Salt and sugar reductions under different scenarios, based on work by the Institute of Fiscal Studies for the National Food Strategy[ii]

Potential health and economic gains[i]

One quarter of adults in England are affected by obesity (25% of men, 26% of women)[x,2]. It has been estimated that in the UK there are approximately 7.6 million people living with CVD[xi], 4.3 million people with type 2 diabetes[xii] and 375,000 new cases of cancer[xiii] every year.

The proposed levy has the potential to reduce obesity and cases of CVD, type 2 diabetes, cancer and respiratory disease, thus having a beneficial impact on population health. Just over half of the estimated gains from the proposed levy are from reduced sugar intake (54%), with the rest being from reduced salt intake (46%). A large amount of the health gains attributable to reduced sugar intake are due to BMI reductions (58%).

It has been estimated that the levy could result in a reduction in weight of between 0.76kg and 2.12kg in women and 0.89kg and 2.52kg in men, depending on the degree of responses from industry and consumers. This could result in a decline in the prevalence of overweight and obesity by up to 10.5% in women and 10.9% in men.

Data has also shown that the levy could reduce preventable chronic diseases, and in turn improve life expectancy and quality-adjusted life years (QALYs)[3]. The total number of preventable cases of chronic disease could be reduced by almost 2 million over 25 years as a result of this levy. This includes an estimated reduction in cases of CVD, the leading cause of death in the UK, by more than 1 million over 25 years (13% reduction from current figures). In addition, up to 571,000, 11,000, and 249,000 cases of type 2 diabetes, cancers and respiratory disease respectively could be prevented (scenario 4). In a scenario where there was full reformulation by manufacturers but with no response from consumers (scenario 2), the levy could result in over 742,000 fewer cases of CVD, over 374,000 fewer cases of type 2 diabetes, over 6,000 fewer cases of cancer and over 165,000 fewer cases of respiratory diseases over a 25-year period. Even with the lowest response level from industry and consumers (scenario 1), over 650,000 cases of these diseases could be averted.

In turn, this could result in over 3.7 million additional QALYs gained across the UK population, worth an estimated £77.9 billion over 25 years (scenario 4). If industry fully reformulated but there was no consumer responses to the levy (scenario 2), more than 2.5 million additional QALYs could be gained at a saving of an estimated £57.6 billion over 25 years. Even with the lowest response from industry and consumers (scenario 1), approximately 1.2 million QALYs could be gained, worth £26.8 billion to the UK economy.

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[2] Overweight is defined by a Body Mass Index (BMI) of ≥ 25 kgm^2, while obesity is defined by a BMI of ≥ 30 kgm^2

[3] Quality adjusted life years (QALYs) is a measure of disease burden, and considers both the quality and quantity of life lived

Conclusion

The food industry currently produces and sells food that is contributing to poor health and is imposing an economic burden on the UK. Analysis shows that the majority of manufactured foods produced by the largest companies are classified as less healthy. The existing levy on drinks has had a big impact on reducing the sugar content of soft drinks. A further levy could be used to reshape a much boarder range of products and to shift product portfolios towards being much healthier.

The findings from the new research presented here demonstrate that there could be meaningful health and economic gains achieved in the UK by introducing a new levy on the food industry, building on the success of SDIL. In the best-case scenario, with a high response from both consumers and industry, the total number of preventable cases of chronic disease could be reduced almost 2 million over 25 years, including reductions in CVD, type 2 diabetes, respiratory disease and cancer. This in turn could contribute to gains of more than 3.7 million QALYs, worth £77.9 billion to the economy over 25 years. Even with the lowest response from industry and consumers, over 1.2 million quality-adjusted life years could be gained, worth £26.8 billion to the UK economy. With levels of obesity and chronic diseases increasing, and dietary targets remaining unachievable for many, a new levy could be a vital intervention to help make healthier options more affordable and support healthier populations up and down the country.

Recipe for Change is a campaign calling for a new industry levy to help make our food healthier, while raising revenue that can be invested back into children's health.

We are a coalition of organisations led by Food Foundation, Sustain and Obesity Health Alliance, with support from British Heart Foundation and Action on Salt and Sugar, and with funding from Impact on Urban Health. Please see our website for more information and how to get involved: **recipeforchange.org.uk**

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