

Would the National Food Strategy's Sugar and Salt Reformulation Tax unfairly impact on households with low incomes?

DATE: February 2022

BY: Shona Goudie and Anna Taylor

AT A GLANCE

- > The National Food Strategy (NFS) has recommended the introduction of a 'Sugar and Salt Reformulation Tax' to change fiscal incentives in the food system to better support healthy diets.
- > There are concerns that this tax could be inherently regressive, disproportionately affecting the living costs of lower income households. However, the current evidence base does not support this.
- > The tax aims to reduce consumption of processed foods high in sugar and salt, and thereby improve public health. It would primarily do so by incentivising manufacturers to reformulate their products to reduce the amount of sugar and salt they use.
- > Food prices would, for the most part, only increase when reformulation is not achieved. It is likely that the tax would lead to at least some increase in prices where foods are not fully reformulated. Analysis from the NFS predicts that this could amount to 16-20p per adult per day.
- > Because lower income groups have a smaller budget for food, any price increases would account for a higher proportion of their overall food expenditure.
- > However, lower income households are likely to be more responsive to price increases and therefore more likely to reduce their consumption of taxed foods to avoid having to pay more.
- > Furthermore, because lower income groups have higher rates of diet-related disease, the tax and subsequent price increases could have a bigger impact on improving their health.
- > Introducing additional measures to improve access to healthy food for people on lower incomes would further mitigate against the risk of regressivity.

Introduction

The Introduction of a 'Sugar and Salt Reformulation Tax' is the leading recommendation in the final report from England's National Food Strategy (NFS), an independent review published in the summer of 2021¹. The NFS proposes a £3/kg tax on sugar and a £6/kg tax on salt sold for use in processed foods or in restaurants and catering businesses.

The prevalence of diet-related ill health and its consequences have been steadily increasing in recent decades. As a nation we consume a damaging amount of salt and sugar: high salt consumption is associated with high blood pressure leading to heart attacks and strokes; and high sugar consumption is proven to lead to dental decay and contribute to obesity, increasing the risk of a number of non-communicable diseases including type 2 diabetes, cardiovascular disease and some cancers². With fewer than 1 in 3 adults considered to be a healthy weight, it is widely accepted that bold action is required to improve diets in the UK. Excess weight costs the UK approximately £74 billion every year in lost workforce productivity, reduced life expectancy and burden on the NHS³.

A large proportion of the free sugars (65%)⁴ and salt (61%)⁵ we consume are in the form of highly processed foods (often referred to as junk foods), which tend to also be calorie dense and nutrient poor.

The NFS identified a 'junk food cycle' - a reinforcing feedback loop within the food system which results *from* our human appetite for energy-dense foods and results *in* a food industry which is economically geared to produce and market these foods to the detriment of our health⁶. The Sugar and Salt Tax proposed by the NFS is intended to start to change the fiscal incentives within the food system which perpetuate the escalation of the junk food cycle.

This recommendation has been met with support by many, but questions have also been raised regarding whether it would be regressive, unfairly impacting on low-income households. In this briefing we explore the arguments around regressivity, providing an initial assessment based on the available evidence to judge whether concerns regarding the NFS recommended tax on salt and sugar can be substantiated.

How should taxes be judged?

Correcting a market failure

Economists argue that taxes should be judged on whether they can successfully: correct a market failure; raise revenue; or, redistribute wealth (rather than all three); and that the tax system as a whole should be judged on whether or not it is regressive (rather than individual taxes).

The proposed sugar and salt tax is intended to correct a market failure resulting from the fact that the real cost of sugar and salt in processed foods to individuals and to society is considerably higher than the actual cost of these ingredients paid by manufacturers (and ultimately consumers). Several studies have examined the value of these externalities. One suggests that for every £1 spent on food, an additional £1 is generated in externalities^{*7,8} of which 37p is due to diet-related disease⁹.

There is a cost to the individual when they eat unhealthy food, that they don't necessarily account for at the time of eating – namely the risk of future health problems, resulting in reduced quality of life, reduced earnings and reduced life expectancy. Moreover, children and adults who are an unhealthy weight may experience bullying or stigma which may limit their opportunities further. The additional costs of diet-related diseases also fall on wider society through increased treatment costs for the NHS, decreased national productivity due to ill health and consequential lost tax revenues, and increased numbers of people on social support payments due to diet-related disabilities¹⁰.

The introduction of fiscal measures targeting sugar and salt in processed foods can ensure that the costs are more appropriately accounted for, and thereby lead to levels of demand for these foods that reflect the real costs. By incorporating some of these real costs into the actual cost and tackling this market failure, the tax should be judged on whether

it effectively tackles this market failure, saving individuals and society more than it costs.

Modelling undertaken for the NFS shows that the proposed tax could reduce consumption of sugar and salt, resulting in a total gain to the UK economy in the region of £63 billion over 25 years from savings to the NHS and social care system, and greater economic outputs due to a larger and healthier workforce. Limitations in the modelling mean that estimates of the potential health benefits that could arise from the tax are likely to have been underestimated and therefore the potential savings are likely to be considerably higher. For example, savings to the NHS from reduced treatment of musculoskeletal disorders are not included. There is evidence indicating that treating musculoskeletal problems make up to 41% of the cost of treating those with high BMI³. It is anticipated that some transitional costs would be incurred by government in implementing and enforcing the tax, and incurred by business in administering the tax and in reformulating (which may pass through to the public), but it is unlikely these will be greater than the savings and revenue generated by the tax.

Inequitable costs or savings to subgroups of the population

Economists then examine whether the net effects from the tax are distributed equally over population sub-groups, and, if not, whether other measures (such as subsidies) are needed to make the outcome fairer.

There are concerns that the NFS recommended tax could be regressive. Indeed, the NFS recommends that the revenue generated from the tax (which they estimate would be £2.9-3.4 billion per year) should be used to pay for government schemes which subsidise the cost of healthy food for those on a low income.

This briefing examines evidence on the likely

*An 'externality' arises when the production or consumption of a product results in a cost (or benefit) to an unrelated third party. Externalities lead to market failure because a product or service's price does not reflect the true cost (or benefit) of that product or service. Externalities are costs that are borne by the individual consumer in the future but are not taken into account at the point of consumption.

differential effects of the tax (in terms of both savings and costs) on low-income households. The *costs* of the NFS tax to low-income households would be *greater*:

- a. if people on lower incomes on average consume higher volumes of sugar and salt, and so the price increase would affect more of their current purchases compared to those on higher incomes, and/or;
- b. if people on a lower income have a smaller food budget to begin with so the tax would make up a higher proportion of their expenditure. (*See section [here](#)*)

The *savings* would be *lower* if these households are at lower risk of diet-related disease and therefore less likely to see improved health benefits (*see section [here](#)*).

If the net effect is that low-income households do incur greater cost in their shopping baskets and fewer health care savings than high income households, the tax will be regressive. If the cost of their shopping basket is higher, some argue it could unfairly limit the choice or individual freedom of poorer individuals compared to those who are more well off. Some even argue it would be unethical because food is an essential need (in contrast to other consumption taxes on items such as cigarettes and alcohol).

The tax is unlikely to be regressive if retail prices do not substantially increase, either through manufacturers reformulating their products or absorbing the cost of the tax rather than passing it through to customers (*see section [here](#)*) or if low-income households change their purchasing habits to avoid paying higher prices resulting from the tax (*see section [here](#)*).

What effect could the tax have on reformulation and prices?

The overarching aim of the Salt and Sugar Reformulation Tax is to reduce diet-related ill health through reducing consumption of calories, sugar and salt. The tax would have two routes to achieve this:

- 1) by encouraging reformulation by manufacturers (whereby product recipes are changed to reduce the amount of sugar and salt they contain), thus enabling manufacturers to avoid paying the tax, and;
- 2) by increasing prices of foods containing these ingredients, encouraging people buy less of them. (Where reformulation is not undertaken, manufacturers would have to pay the taxes, and the cost of these taxes would likely be passed on to the public.)

1. Incentivising reformulation by manufacturers

Manufacturers could respond to the tax by reformulating their products to reduce the amount of tax they pay. Reformulation is a low agency intervention¹¹, placing little demand on the individual motivation or resources of consumers, and thereby encouraging healthier diets without a reliance on people having to make conscious decisions or to change their habits. Where reformulation is sufficient to avoid the tax completely, it would mostly do so without increasing prices for the public, although there are some costs associated with reformulation (e.g. the costs of innovation, changes to production and ingredients) that may be pass through.

For some products reformulation is not possible (or may not be desirable for companies for commercial reasons). Sugar and salt are not only used to improve taste, but also play an essential role in some products as preservatives to extend shelf life or as contributors to the structure and texture of the product. Where reformulation reduces a product's shelf life, this may have a knock-on impact on price, as well as storability and waste¹².

Despite this, reformulation is achievable in many cases. Public Health England's voluntary Salt Reduction Programme has resulted in the reduction in salt in breakfast cereals and bread by up to 50% since 2006 (though progress in other categories has been slower)¹³. Similarly, their Sugar Reduction Programme resulted in significant reformulation of

some products, such as yogurts and breakfast cereals but less so in others such as confectionery¹⁴. However, the sugar content of confectionery has actually increased over the years – we have seen a 23% increase in sugar content per 100g of comparable chocolate confectionery between 1992 and 2017 – demonstrating that it is possible for these products to contain less sugar if they reverted to their previous formulations¹⁵.

The Soft Drinks Industry Levy (SDIL) led to substantial reformulation of fizzy drinks. Between 2015 and 2019, sales of drinks subject to the levy actually increased by 15%, but a 44% reduction in the sugar content of these drinks resulted in total sugar sales from soft drinks decreasing by 35.4%¹⁶ (see Figure 1). The banded structure of the levy meant there were clear targets for reformulation to minimise the amount of tax payable. Other

beverage taxes around the world have also shown a reduction in sales of high sugar drinks, including in Mexico, Barbados and South Africa¹⁷. However, it is important to note that soft drinks are practically easier to reformulate than foods, as sugar is not integral to the structure of the product and a similar taste can be replicated with artificial sweeteners.

There is less evidence on the extent to which existing food taxes (rather than drink taxes) have led to reformulation. The Hungarian Public Health Tax reportedly resulted in changes to the composition of 40% of foods subject to the tax. Of those, just under a third entirely removed the taxed ingredient¹⁸. As with the SDIL, this is designed to allow minimum amounts of sugar and salt before the tax applies.

UK Soft Drinks Industry Levy

The NFS recommended tax would build on the success of the Soft Drinks Industry Levy (SDIL). The SDIL was introduced in the UK in 2018 with the aim of encouraging manufacturers to reformulate sugar sweetened beverages (SSBs) to contain less sugar. It has a tiered structure and is levied volumetrically within each band - drinks with a sugar content of more than 5g per 100ml are taxed at 18p per litre, and more than 8g per 100ml are taxed at 24p per 100ml¹⁷. Revenue generated from the levy was initially earmarked to be spent on measures that support children’s health. Figure 1 shows how the tax resulted in reformulation of soft drinks in line with the tax thresholds.

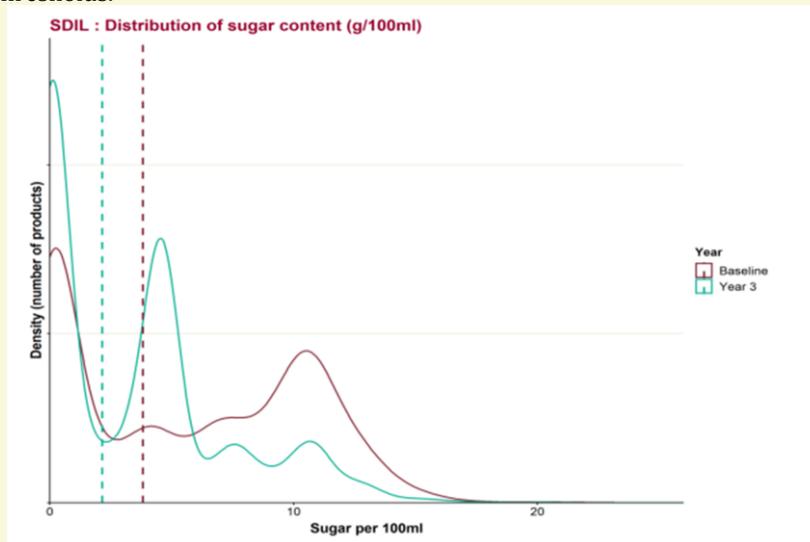


Figure 1: Number of drinks subject to the SDIL by total sugar per 100ml for baseline (2015) and year 3 (2019). Vertical lines show the sales weighted average sugar content for the same time periods. Source: [Public Health England](#).

The extent to which products would be reformulated under a new food tax, such as that proposed in the NFS, is not possible to predict with certainty. As a result, the extent to which households of different socio-economic status would be differentially affected by reformulation is also difficult to predict.

2. Increasing prices at the retail level

The NFS estimates that the proposed tax would increase overall prices of affected products by 4-5% after making some assumptions about expected levels of reformulation. It provides some examples of how prices could change for existing products, in the absence of reformulation, if the recommended tax was introduced:

Cadbury Dairy Milk		Cadbury Dairy Milk 30% less sugar	
			
CURRENT COST OF A PACK £0.60	COST OF A PACK AFTER TAX £0.68	CURRENT COST OF A PACK £0.60	COST OF A PACK AFTER TAX £0.64
SUGAR CONTENT PER PACK 25g	PRICE RISE FROM SUGAR ↑ 7.5p	SUGAR CONTENT PER PACK 13g	PRICE RISE FROM SUGAR ↑ 4p
SALT CONTENT PER PACK 0.11g	PRICE RISE FROM SALT No change	SALT CONTENT PER PACK 0.06g	PRICE RISE FROM SALT No change

Salt and Vinegar Pringles 200g		Tesco Salt and Vinegar Crisps (6x25g)	
			
CURRENT COST OF A PACK £2.50	COST OF A PACK AFTER TAX £2.53	CURRENT COST OF A PACK £0.77	COST OF A PACK AFTER TAX £0.78
SUGAR CONTENT PER PACK 3.6g	PRICE RISE FROM SUGAR £0 (not free sugars)	SUGAR CONTENT PER PACK 0.2g	PRICE RISE FROM SUGAR £0 (not free sugars)
SALT CONTENT PER PACK 4.6g	PRICE RISE FROM SALT ↑ 3p	SALT CONTENT PER PACK 0.4g	PRICE RISE FROM SALT ↑ 1p

The proposed tax is targeted at manufacturers rather than citizens. Where manufacturers choose not to reformulate their products or where they are unable to, the price of the product will increase for

Hungarian Public Health Product Tax

In 2011, the Hungarian Government introduced the Public Health Product Tax on foods high in sugar, salt or caffeine. The tax applies to a range of products including soft drinks, energy drinks, pre-packaged products with added sugar, chocolates/cocoa powder, flavoured beer/alcohol, fruit preserves, salted snacks and condiments. The rates of tax vary according to the product and threshold level of the unhealthy ingredient. The tax was designed to apply to products where there were healthier options available, with the aim of promoting healthier consumption and product reformulation, and generating revenue to supplement healthcare workers' salaries²⁶.

the manufacturer and/or the public. Manufacturers would, to an extent, control the magnitude of the price increases that are passed on to citizens – for example by reducing portion sizes, or by absorbing some or all of the tax.

In the case of the UK's SDIL, an estimated 105-108% of the tax was passed on to the public where drinks were not reformulated¹⁹. Real world taxes from other countries provide additional insight, although it is worth noting that the impact of taxes is very dependent on the design of the tax and context in which they are applied, with mixed results on the extent to which such taxes are passed through to the public. A review of sugary drink taxes across different countries by the IFS found that in nearly all cases the tax was passed through to consumers at a rate of less than 50% - i.e. that the prices increased by less than half the amount of the total tax value²⁰.

The pass through for the NFS recommended tax would likely not be as high, as it would be applied

Mexico Food Tax

In 2014, a tax on SSBs and an 8% tax on high calorie (greater than 275 kcal/100g), non-essential foods were concurrently implemented by the Mexican Government to tackle high levels of obesity and type 2 diabetes²³. The tax is ad valorem (calculated as a flat rate percentage of the retail price) rather than based on quantity of unhealthy ingredients.

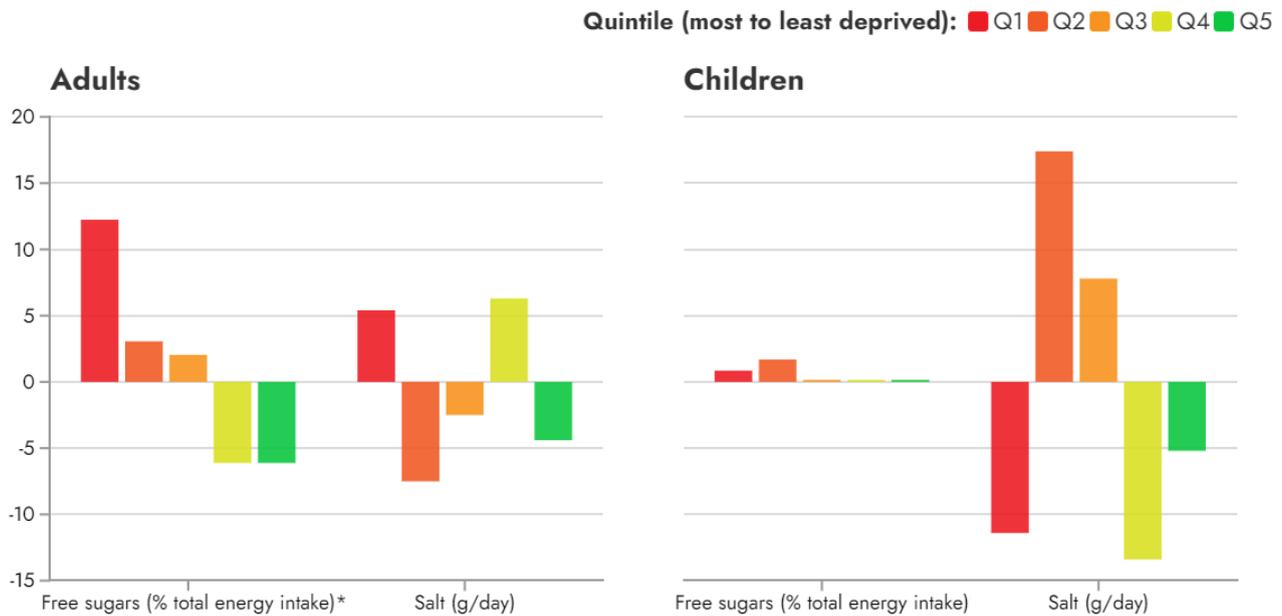


Figure 2: Percentage deviation from population average of sugar and salt consumption by equivalised income group. *indicates statistically significant. Source: Analysis of *National Diet and Nutrition Survey* waves 9-11 (free sugars) and wave 5 (salt).

at manufacturer level, whereas most sugar sweetened beverage (SSB) taxes are applied at retail level and so directly affect the customer. In Mexico, the pass through of the 8% tax depended on the product type – for example the increase in price of cookies was greater than 8% but for cereals and salty snacks it was less than 8%²¹.

The extent to which increases in prices of certain products affect the price of individual shopping baskets depends on whether people change their shopping behaviour as a result of these price increases. Analysis from the NFS predicts that the introduction of the tax as recommended could increase prices by a fairly modest 16-20p per adult per day (£58-73 per year) if fully passed through. This range is based on assumptions about levels of reformulation and assumes that there is no behavioural response to price rises (in reality, people are likely to switch to alternative, cheaper products). Some studies have suggested that a 20% increase in prices is needed on SSBs, and 10% on food, to incentivise meaningful alterations in purchasing behaviour²².

Would the cost of the tax be greater for people on lower incomes?

Impact on current purchases

If people on lower incomes on average consume higher volumes of sugar and salt, any price increases from the tax would affect more of their current purchases, resulting in greater costs to them than for higher income people.

However, the evidence shows that average salt consumption by adults has no statistically significant gradient across income groups and that though the differences for sugar consumption by adults are statistically significant, they are relatively small. On average people in the lowest income quintile consume 50.1g of sugar a day (the equivalent of 12.5 teaspoons), compared with 47.5g per day in the highest income quintile²³. Figure 2 shows the percentage deviation from the population average by different income bands in their consumption of sugar and salt.

Therefore, the evidence suggests that the effect of

the tax on increasing prices of current purchases would likely only be slightly greater for low-income households than for high-income households (assuming reformulation would not differentially affect low-income households).

Proportion of expenditure

The next consideration to assess regressivity is whether the tax would also have greater costs for people on low incomes if they have a smaller initial food budget – with the tax then accounting for a higher proportion of their expenditure.

The NFS calculated estimates for the percentage increase in prices that citizens may face depending on income group and the degree of reformulation that occurs. Specifically, it estimated that the poorest quarter of the population could experience a 4.6-5.7% increase in the cost of their food while the richest would experience only a 3.4-4.3% increase. These estimates assume that after reformulation, the cost of the tax is fully passed through and also assumes that when prices go up people do not entirely switch their purchases to other products which have not increased in price. These percentage differences reflect the fact that total expenditure by the poorest on food is much lower than the richest – and therefore similar actual cost changes reflect a higher percentage of overall expenditure. People on lower incomes already spend a higher proportion of their total income on food: the poorest fifth spend 20% of their total expenditure on food, compared with 12% on average²⁴.

How could people on low incomes respond to the potential increased costs?

Responsiveness to price changes

The principle behind increasing the prices of unhealthy food is to deter the purchase and consumption of these products. The extent to which consumption changes in response to price changes is known as price elasticity. Most foods are relatively price inelastic, meaning increases in

prices do not result in large changes in purchasing behaviour.

A tax only risks being economically regressive if people actually pay it. If people switch to untaxed (healthier) products to avoid the tax, then the tax will not be regressive. Economic theory suggests that lower income households should be more responsive to price changes than higher income households²⁵.

Changes in purchases of unhealthy foods

Evaluation of real-world taxes on food show that they can be effective in changing purchasing patterns and that the biggest reductions in purchases of unhealthy food are seen amongst lower income groups.

For example, in Hungary, an evaluation of their tax found that people with lower levels of education (used as an indicator of socioeconomic status) were twice as likely to switch to a different (cheaper) brand or buy a lower-priced alternative than higher educated people in response to the tax. Price was cited as the main reason for changing purchasing habits (as opposed to increased awareness of healthiness of the products)²⁶. Consistent with that evaluation, another study found that the lowest income groups were more responsive to the introduction of the tax, decreasing their purchasing and overall expenditure on processed foods (including categories not covered by the tax) after the introduction of the tax²⁷.

One evaluation of the Mexico food tax found that there was a reduction in purchases of less healthy foods across all socioeconomic groups, with greater reductions in households of lower socio-economic status²⁸. Another study found that low-income households purchased 10% less of the taxed foods than was expected (based on the pre-tax trend), compared to no change in purchases by higher-income households²⁹.

However, reviews of soft drinks taxes have shown more mixed findings. Contrary to the theory that lower income households should be more price responsive, some studies on SSBs suggest that purchases of soft drinks fell more amongst higher

income households such as in Chile, Catalonia and Philadelphia^{30,31}. In the UK, the SDIL has led to a similar decrease in total sugar purchases across all socio-economic groups, with the biggest reduction seen in group C2 (skilled manual workers) not in the lowest socioeconomic groups³².

Substitution with other foods

In the event of price increases of certain products, people might replace these foods with untaxed items, or pay the higher prices and reduce their expenditure elsewhere. The economic burden on families on low incomes could be minimised if there are healthier substitutes available that they could reasonably be expected to switch to which would prevent their overall food expenditure increasing. Evidence from Hungary shows that substitutions were easily achievable. In response to the tax on pre-packaged sweets, 82% of people made

substitutions to fruit and vegetables, 41% to dairy products, and 16% to home-made sweets. Similarly in response to the tax on salty snacks, 86% made changes to fruit and veg, 65% to homemade salty snacks and 33% to non-salty substitutes³³. While the price differences were not reported, it is likely that people made these switches to avoid paying more.

In the case of SSB taxes, SSBs are easily substituted with artificially sweetened drinks, or even water as a cheaper alternative. However, a tax on ingredients which appear in multiple food categories, including some core (rather than discretionary) food categories, may make switching more challenging. This is an area which The Food Foundation intends to research in more depth.

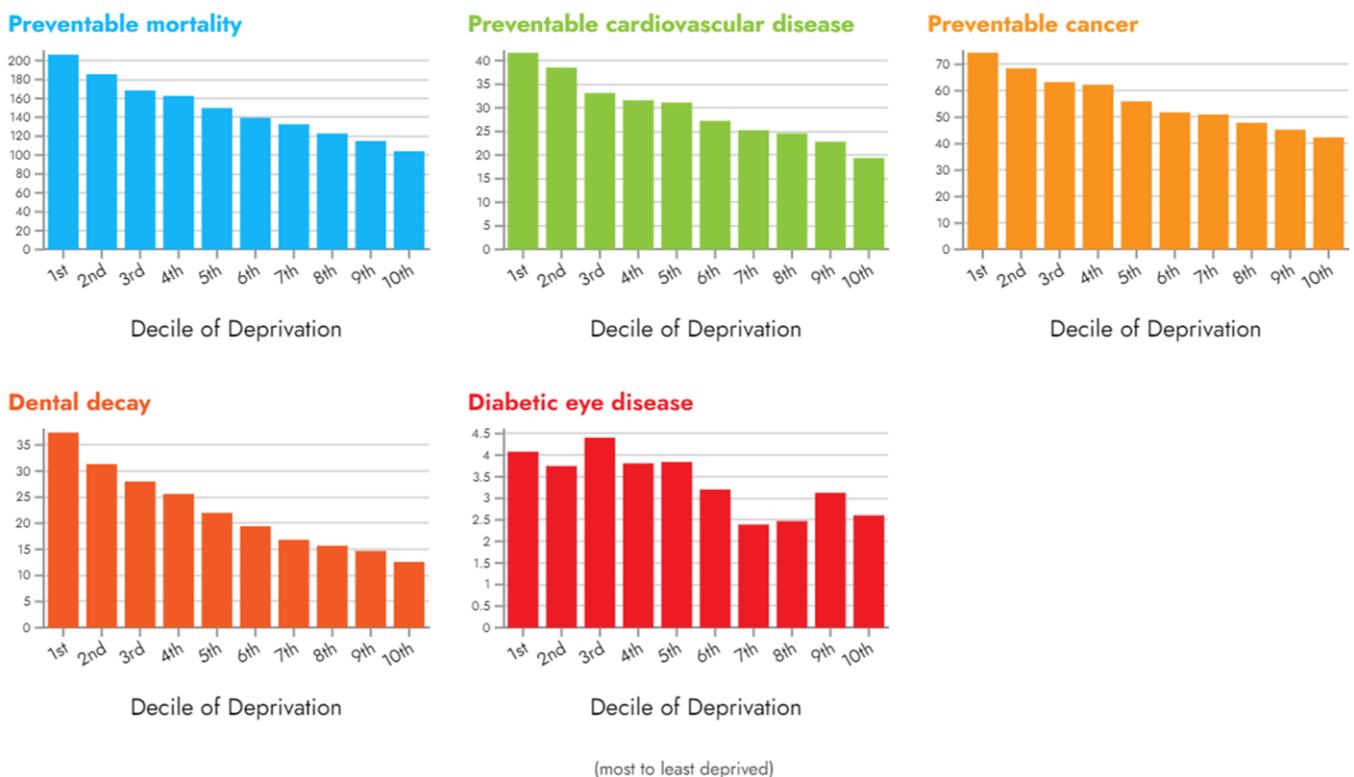


Figure 3: Inequalities in incidence and death rates of diet-related diseases. Y-axis indicates relative risk expressed as percentages, rate per 100,000 people, or mortality per 100,000 people. Source: Replicated from National Food Strategy.

Would the savings of the tax be lower for people on low incomes?

Health Benefits

The tax could have positive health benefits either through motivating changes in purchasing, or through reformulation resulting in healthier products being available. If the tax does prove to disproportionately raise the food costs of low-income households, it could still be justified on health grounds.

Lower income groups have higher rates of diet-related disease. Twice as many children in deprived areas have obesity compared to those in the least deprived areas³⁴. Similar patterns are seen amongst adults. Furthermore, there are clear inequality gradients across income groups in the prevalence of diet-related conditions such as dental, cardiovascular disease and diabetic eye disease, all greatly impacting on quality of life³⁵ (Figure 3).

Mexico has started to see some health benefits from their tax specifically in dental health³⁶, but this hasn't been evaluated by socioeconomic group. Few food taxes have had their health benefits assessed

and overall there is not yet sufficient evidence to conclusively indicate whether a tax on high sugar foods will reliably lead to measurable health benefits³⁷, let alone how this will vary across income groups. This is because health benefits are likely to take some time to be seen (due to the incremental nature of weight gain), and most food and drink taxes have only been introduced in the past decade. Furthermore, health is influenced by a number of factors, and so it is difficult to attribute any changes in health outcomes purely to the introduction of a fiscal measure.

Given the greater responsiveness of low-income people to price increases and the greater prevalence of diet-related disease, it can be expected that a tax on unhealthy foods should have a larger impact on reducing consumption of unhealthy foods amongst this group, and thereby improving their health. In this sense, fiscal measures can be considered progressive because even if the economic cost is higher in low-income groups, greater health benefits in these groups could result in a net positive benefit.

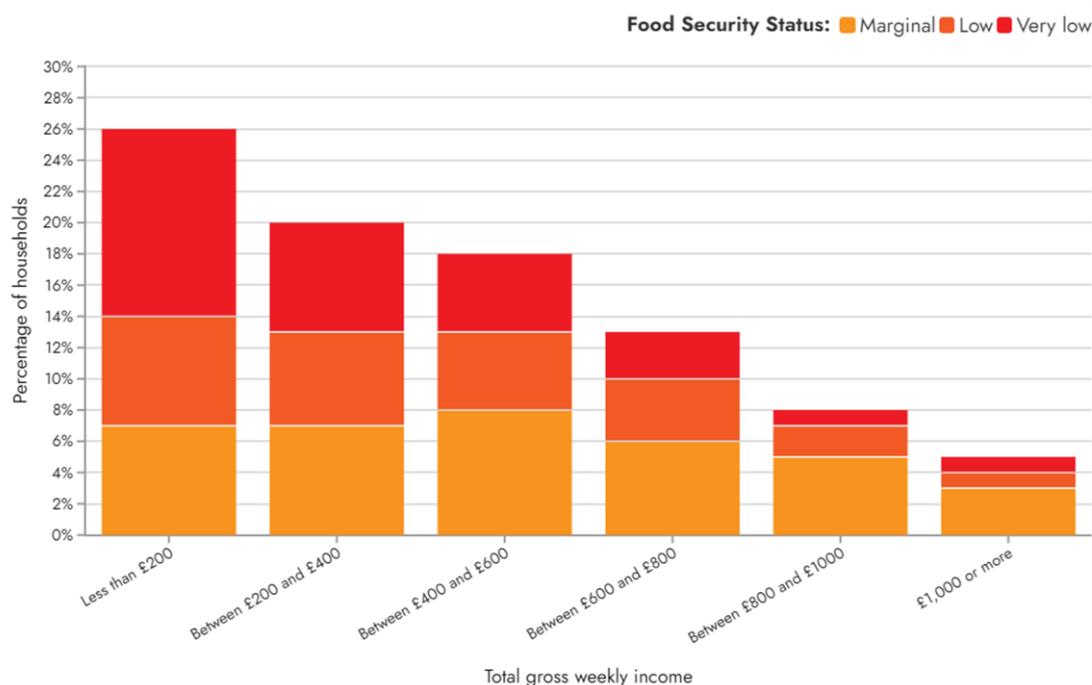


Figure 4: UK Households by total gross weekly income and food security status 2019-2020. Source: *Family Resources Survey, Department of Work and Pensions, 2021.*

Additional measures to benefit people on low incomes

Affordability of healthy food is an ongoing challenge for many people living in the UK – a problem that has been greatly exacerbated by the impact of the Covid-19 pandemic on low-income households. Even before the pandemic, 8% of people in the UK were experiencing low or very low food security according to government reported data³⁸. This is directly linked to income, with the highest risk of food insecurity in households with the lowest income (Figure 4).

Food insecurity affects both the quantity and quality of food which people can afford, which means that the relative cost of healthy and unhealthy calories and the resources required to cook from scratch impact on the diets of those experiencing food insecurity. Foods higher in fat, salt and/or sugar tend to be the cheapest source of calories (Figure 5).

It is therefore not surprising that people of lower socioeconomic status on average have less healthy diets than people of higher socioeconomic status. The lowest income groups eat significantly less than the minimum recommended five portions of

fruit and vegetables per day, consuming just 3.2 portions compared with 5.1 portions in the highest income group³⁹.

To mitigate risks of regressivity from the tax, there are additional measures that could be taken to ameliorate the impacts on poorer people in the form of subsidies which offset the increase in cost of unhealthy foods resulting from the tax, rebalance the cost of the food basket and ensure access to healthy food for people on lower incomes.

The NFS has recommended that revenue generated from the introduction of the tax should be used to subsidise healthier foods through funding social prescribing of fruit and vegetables for low-income people, and through increasing the number of children who could benefit from Free School Meals, holiday schemes and the Healthy Start Scheme. This would be the absolute minimum that would be required. Such policy changes are already needed to combat food insecurity, even before the introduction of the tax. Those measures also wouldn't provide any additional help for the poorest in society who are already eligible for those schemes.

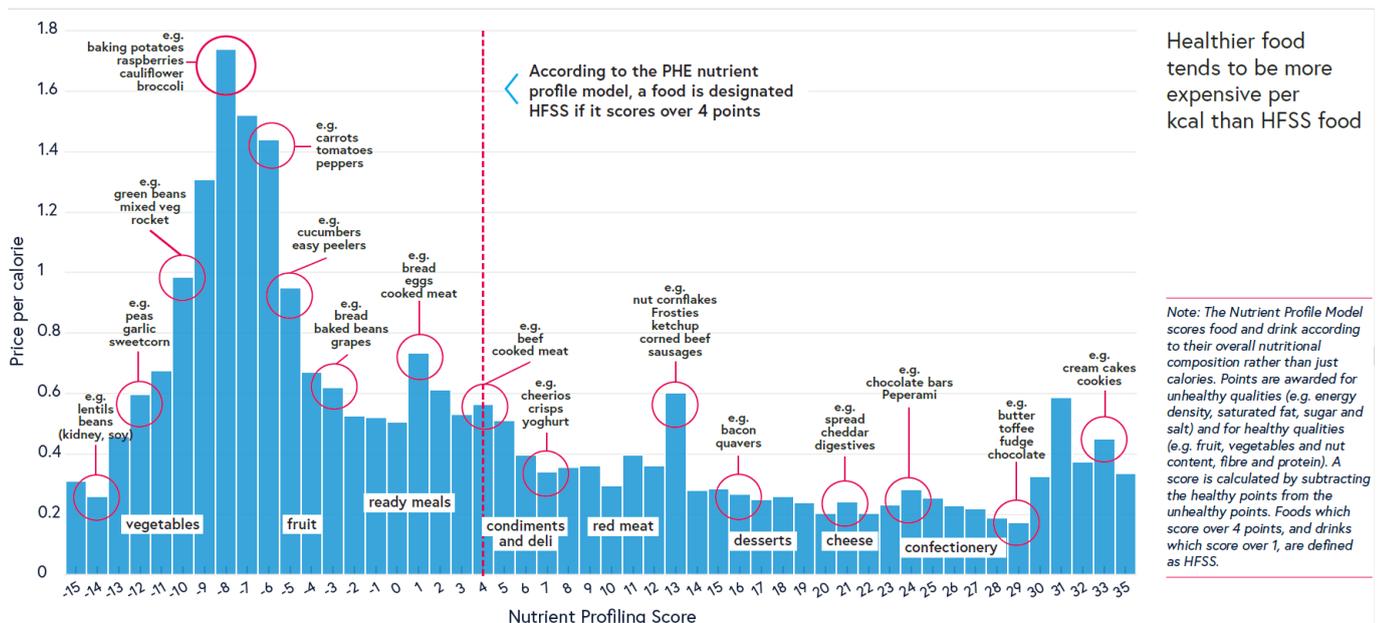


Figure 5: Average price per calorie of products within each Nutrient Profiling Score. (Foods with a score higher than four are classified as less healthy foods which are high in fat, sugar and / or salt). Source: Copied directly from National Food Strategy.

While using the revenue raised by the NFS tax for those policies would be an important start, there is much more that could and should be done to help people on low incomes access healthier diets that could be achieved through ringfencing the additional revenue generated. While modelling studies indicate that health benefits could be maximised if population wide fruit and vegetables subsidies are introduced alongside taxes on unhealthy foods⁴⁰, the World Health Organisation recommends that any such subsidies should be highly targeted, such as through nutrition assistance programmes to specific groups, to reduce the risk of inequalities being further widened by general subsidies⁴¹.

Public Support

The majority of people are supportive of fiscal measures on unhealthy food. In 2019, 70% of people were supportive of the UK's Soft Drinks Industry Levy and after implementation 67% thought that it was effective⁴². In a poll by the Obesity Health Alliance, 63% of people were supportive of extending the SDIL to other sugary and high calorie foods⁴³. Similarly, a Demos survey found that 53% agreed that government should tax unhealthy food, while 60% thought they should subsidise healthy food⁴⁴.

Furthermore, both the World Health Organisation and the International Monetary Fund have expressed support for fiscal policies to tackle unhealthy diets⁴⁵.

CONCLUSION

Concerns that the Sugar and Salt Reformulation Tax proposed in the National Food Strategy would be inherently regressive overall are not supported by the evidence. Whether or not the tax is economically regressive will depend on the extent to which manufacturers reformulate their products, the extent to which tax costs are passed through to consumers, and the extent to which consumers make switches in their product choices to avoid being subject to any increased costs. If products are reformulated or if people switch to untaxed (healthier) products to avoid paying the tax, then the tax will not be regressive. If the tax *is* economically regressive then the potential to deliver health benefits that outweigh the financial burden and provide greater benefits to those on a low income would likely counterbalance this.

In the event that the recommendation on tax is implemented by Government, it must be done in such a way as to minimise any potential risk to people on low income, for example by earmarking any revenue generated to be used for measures to make it easier for people on low incomes to access healthy foods in place of unhealthy foods.

With thanks to our funder:

The Nuffield Foundation is an independent charitable trust with a mission to advance social well-being. It funds research that informs social policy, primarily in Education, Welfare, and Justice. It also funds student programmes that provide opportunities for young people to develop skills in quantitative and scientific methods. The Nuffield Foundation is the founder and co-funder of the Nuffield Council on Bioethics, the Ada Lovelace Institute and the Nuffield Family Justice Observatory. The Foundation has funded this project, but the views expressed are those of the authors and not necessarily the Foundation. Visit www.nuffieldfoundation.org



REFERENCES

- ¹[National Food Strategy, 2021. The Plan.](#)
- ²[Relationship between Rippe and Angelopoulos. Added Sugars Consumption and Chronic Disease Risk Factors: Current Understanding. Nutrients. 2016 Nov; 8\(11\): 697.](#)
- ³[National Food Strategy, 2021. The Evidence.](#)
- ⁴[Rauber et al., Ultra-processed foods and excessive free sugar intake in the UK: a nationally representative cross-sectional study. BMJ Open. 2019;9:e027546.](#)
- ⁵[Public Health England, 2018. Salt targets 2017: Progress report.](#)
- ⁶[National Food Strategy, 2021. The Plan.](#)
- ⁷[Investophia. How do externalities affect equilibrium and create market failure](#)
- ⁸[Griffith et al., 2017. Corrective Taxation and Internalities from Food Consumption. CESifo Economic Studies, Volume 64, Issue 1, March 2018, Pages 1–14.](#)
- ⁹[Sustainable Food Trust, 2017. The Hidden Cost of UK Food.](#)
- ¹⁰[Institute for Fiscal Studies, 2016. Using taxation to reduce sugar consumption.](#)
- ¹¹[Centre for Diet and Activity Research – Written evidence](#)
- ¹²[Turn2Us, 2020. Millions across UK are living without appliances.](#)
- ¹³[UK Parliament POST, 2021. Food and drink reformulation to reduce fat, sugar and salt.](#)
- ¹⁴[Public Health England, 2020. Sugar reduction: Report on progress between 2015 and 2019.](#)
- ¹⁵[Hashem et al., 2019. Cross-Sectional Survey of the Amount of Sugar and Energy in Chocolate Confectionery Sold in the UK in 1992 and 2017. Nutrients. 2019 Aug; 11\(8\): 1798.](#)
- ¹⁶[Public Health England, 2020. Sugar reduction: Report on progress between 2015 and 2019.](#)
- ¹⁷[National Food Strategy, 2021. The Plan.](#)
- ¹⁸ ref
- ¹⁹[O'Connell and Smith, 2020. Corrective Tax Design and Market Power.](#)
- ²⁰[Institute of Fiscal Studies, 2019. The evidence on the effects of soft drink.](#)
- ²¹[Salgado and Ng, 2019. Understanding heterogeneity in price changes and firm responses to a national unhealthy food tax in Mexico. Food Policy. 2019 Dec; 89: 101783.](#)
- ²²[Sacks et al., 2021. Do taxes on unhealthy foods and beverages influence food purchases? Curr Nutr Rep 2021 Sep;10\(3\):179-187.](#)
- ²³[Public Health England. National Diet and Nutrition Survey.](#)
- ²⁴[Office for National Statistics. Family spending in the UK: April 2019 to March 2020.](#)
- ²⁵[World Health Organisation, 2015. Using price policies to promote healthier diets.](#)
- ²⁶ Ibid
- ²⁷ Ibid
- ²⁸[Olmedo et al., 2018. The Socioeconomic Disparities in Intakes and Purchases of Less-Healthy Foods and Beverages Have Changed over Time in Urban Mexico. The Journal of Nutrition, Volume 148, Issue 1, January 2018, Pages 109–116.](#)
- ²⁹[Batis et al., 2016. First-Year Evaluation of Mexico's Tax on Nonessential Energy-Dense Foods: An Observational Study. PLoS Med. 2016 Jul 5;13\(7\):e1002057](#)
- ³⁰[Caro et al., 2018. Chile's 2014 sugar-sweetened beverage tax and changes in prices and purchases of sugar-sweetened beverages: An observational study in an urban environment. PLoS Med 15\(7\): e1002597.](#)
- ³¹[Castello, 2018. Impact of SSB taxes on consumption.](#)
- ³²[Public Health England, 2020. Sugar reduction: Report on progress between 2015 and 2019.](#)
- ³³[World Health Organisation, 2015. Using price policies to promote healthier diets.](#)
- ³⁴[NHS Digital. National Child Measurement Programme 2019-20.](#)
- ³⁵[National Food Strategy, 2021. The Plan.](#)
- ³⁶[Hernandez et al., 2021. Taxes to Unhealthy Food and Beverages and Oral Health in Mexico: An Observational Study. Caries Res 2021;55:183–192.](#)
- ³⁷[UK Parliament POST, 2021. Food and drink reformulation to reduce fat, sugar and salt.](#)
- ³⁸[Department of Work Pensions, 2021. Family Resources Survey 2019-20.](#)
- ³⁹[Analysis of the National Diet and Nutrition Survey, Public Health England.](#)
- ⁴⁰[Nnoaham et al., 2009. Modelling income group differences in the health and economic impacts of targeted food taxes and subsidies. Int J Epidemiol 2009 Oct;38\(5\):1324-33.](#)
- ⁴¹[World Health Organisation, 2015. Using price policies to promote healthier diets.](#)
- ⁴²[Adams et al., Public acceptability of the UK Soft Drinks Industry Levy: repeat cross-sectional analysis of the International Food Policy Study \(2017–2019\). BMJ Open 2021;11:e051677.](#)
- ⁴³[Obesity Health Alliance, 2020. 74% of the Public Support Government Action on Obesity in the Wake of Emerging Links with COVID-19.](#)
- ⁴⁴[Demos, 2021. Food in a pandemic.](#)
- ⁴⁵[IMF, 2020. Assessment of Tax Expenditures and Corrective Taxes.](#)

