

Targeting the health of the nation: a policy brief

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Key points

- Despite efforts by successive governments to reduce obesity rates, its prevalence has [doubled since the 1990s](#), and three in five people in the UK are now [overweight or obese](#).
- We need more ambitious policies that will incentivise businesses to prioritise health and deliver the level of impact required. That is why we propose that the UK Government should implement mandatory health targets for large grocery retailers.
- Retailers would be encouraged to improve the healthiness of their offer by increasing the overall nutritional quality, as measured by a nutrient profile score. This would set the outcome but give retailers the flexibility to choose how they meet the target.
- Our modelling estimates that setting a health target for the 11 largest grocery retailers, at levels similar to those already achieved by today's 'best' players, could reduce calorie purchases by around 80 kcal per person per day among the population with excess weight, and obesity prevalence by approximately 23%. This would translate to around four million fewer people living with obesity in the UK and around £20 billion in annual cost savings to society.¹
- Targets must be mandatory to achieve the required impact, underpinned by data reporting and monitored by a government body with the power to enforce. There should be a phased introduction with targets effective only after mandatory reporting has been in place for sufficient time. The [implementation plan](#) includes further detail.
- An [economic assessment](#) of the policy proposal suggests it is unlikely to have a significant cost to businesses or consumers. This is due to the sufficient lead-in time between announcement and enforcement, and the flexibility it provides to retailers to find the most cost-effective methods to enhance the healthiness of their sales.

The case for action

The health of the nation should be a priority for all governments. Yet in the UK [obesity has doubled](#) since the early 1990s, and now three in five people are [overweight or obese](#). Obesity [increases the risk of many preventable diseases](#), including type 2 diabetes, cardiovascular disease and some cancers, alongside impacts on mental health and wellbeing. The [annual cost of adult obesity](#) to UK society is estimated at around £98 billion, including at least £19.2 billion of costs to the NHS.

Yet to halve obesity requires only small changes to diets. A person living with excess weight needs to reduce their calorie intake by only 8.5% or [216 calories per day](#). This is a relatively modest shift, yet we know that existing policies are not going to meet the scale of this challenge.

Polling shows that the British public is concerned about obesity and supportive of stronger government action. In a recent [YouGov poll](#) commissioned by the Obesity Health Alliance, 68% of respondents felt that the government should be doing more to make sure healthy food is readily available. The public also recognises a role for industry, with 77% feeling that the [food and drink sector has a responsibility](#) to ensure people stay healthy.

Historically, efforts to tackle obesity have been piecemeal, with small or low-impact policies. And the misconception that obesity is an issue of individual willpower has led policymakers to back the wrong approaches to tackling it. But evidence shows that weight loss is only likely to happen in a sustained way if our food environments change. The Government should focus on implementing policies that encourage the food and drink sector to improve its practices, making the places where we shop and the foods we buy healthier for the consumer.

In this world, consumers would enter a supermarket, whether in-store or online, and be met with a shopping experience designed to result in healthier choices. The changes do not need to be large. Tweaks to existing stocking,

advertising, marketing, reformulation and store design practices would be enough to achieve a sustained reduction in calorie consumption.

Our tool for achieving this is mandatory health targets for retailers.

Specifically, we propose that the government should set targets for large grocery retailers to increase the sales-weighted average² nutrient profiling model score of their food product portfolio. This is what we believe is the current best measure for healthiness.

These targets should be set at an achievable level that is close to the level of the current best performers. It should be announced in advance of implementation with a clear timetable (see [implementation plan](#)). This will allow industry time to shift its practices to avoid penalties. Unlike taxes, which have an inherent cost attached, targets should not increase food prices as they require subtle shifts in existing retailer practices with no upfront cost passed to the consumer. Rather than micromanaging businesses, this approach would enable the Government to work in partnership with industry, by setting the direction while allowing retailers to decide on the best approach for their business.

Our modelling estimates that setting health targets for the 11 largest grocery retailers at levels similar to that already achieved by today's 'best' players could reduce calorie purchases among the population with excess weight by around 80 kcal per person per day and cut obesity prevalence by approximately 23%.

Achieving system-wide change

The idea of healthy food targets is not new. Since 2006 the UK Government has published and reported against a series of voluntary targets for industry. These are aimed at reducing [salt, sugar and calorie](#) consumption through portion size reductions or changes to the processing or composition of specific products (known as reformulation). These ingredient- or product-specific targets have driven some reductions, particularly in salt, and have set a helpful framework for industry. However, overall progress has been limited due to their voluntary nature. For example, since 2016, average sugar content across the categories targeted has only [reduced by around 3.5%](#) (equivalent to around four kcal per person per day³) compared to the programme's ambition of 20%.

Alongside this, 10 of the 11 largest retailers in the UK already have their own health targets that vary in ambition, scope and transparency. These have not had the impact required because of the products across which targets apply (such as only own brands), inconsistent definitions of 'healthy food sales', and the level at which targets are set. Some of these developments have been driven by pressure from organisations such as [Share Action](#), and the publication of independently assessed healthiness rankings (see [Access to Nutrition Initiative UK Retailer Index 2022](#)).

As long as these targets remain voluntary, it seems unlikely that significant progress will be made, or that those businesses that are yet to prioritise health will be motivated to shift their behaviours.

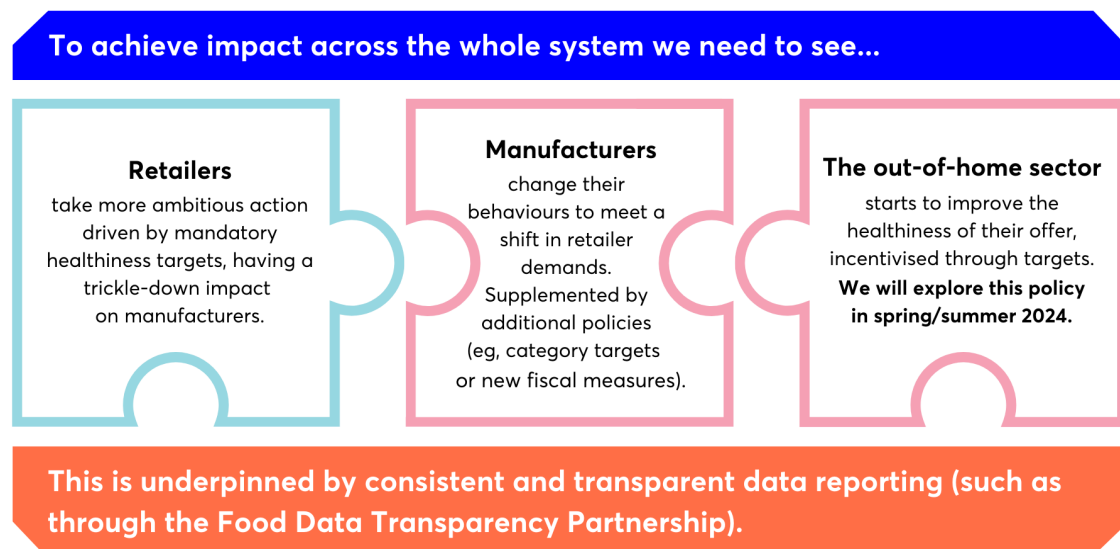
It is widely recognised across the health sector that the Government needs to do more to incentivise action by industry. For example, the [Food Foundation](#) is calling for mandatory business reporting in the food sector, while mandatory sugar and calorie targets were recommended in a [recent report from Action on Sugar](#).

We also believe that we need policies that encourage both reformulation and sales shifts towards healthier options.

The [existing category specific \(salt, sugar and calorie\) targets](#) principally encourage manufacturers to effect change through reformulation and portion size changes. This is the same mechanism by which the soft drink industry levy (SDIL) or any new salt, sugar or category-specific taxes (as recommended in the [National Food Strategy](#)) would have an impact. From [our work earlier this year](#), we know that reformulation will only be part of the solution. Therefore, we need a policy that incentivises action beyond reformulation. We need to see an overall shift in sales, with a rebalancing from less healthy to more healthy products.

To maximise impact, we also need to encourage system-wide action across the food and drink industry, with policies that focus on the retail, manufacturing and out-of-home sectors (see Figure 1).

Figure 1: required system-wide action across retail, manufacturing and the out-of-home sector to reduce obesity rates and improve population health



Below we outline our proposals for each of these sectors.

1. **Retail:** we need health targets for food retailers that set an industry standard and incentivise companies to prioritise healthy sales. **We think these targets should include all food sales**, rather than focusing on specific ingredients or categories as with the existing Government programmes. This approach would encourage action while allowing retailers the flexibility to choose how they meet this target. This could be through reformulation, stock purchasing, product placement or promotions (see Figure 2). We think these targets should be designed to recognise and reward the progress already made by some businesses. This is the focus in this note and our work to date.

Figure 2: tools that retailers could use to achieve our proposed targets



2. **Manufacturers:** retailer targets will drive shifts in manufacturer behaviour as they respond to increased demands for healthier products from retailers, where most of their products are sold. Manufacturers should feel incentivised to do what they can to help retailers achieve their targets. However, this may not be sufficient to encourage the level of action required from manufacturers. Therefore, alongside our proposed retailer target, we endorse specific measures for the manufacturing sector that ensure they also contribute to improving the health of the nation. This could be through the introduction of new salt, sugar or category-specific taxes, as recommended by the [Recipe for Change Initiative](#), led by the Obesity Health Alliance and others. Another option would be mandating category targets, either based on the existing voluntary government targets for [sugar and calorie reductions](#), or focused on the top 10 most impactful food categories we identified in our [Future of Food report](#).

3. **Out-of-home sector⁴:** we also know that we need to see policies aimed at improving the health of the out-of-home offer where we consume an estimated [20 to 25% of our calories](#). The out-of-home sector has received little meaningful attention from policymakers despite its rapid growth. This is largely due to significant data barriers. Our next phase of this work will focus on the out-of-home sector. First, by creating a novel dataset (the first of its kind – linking several data sources and enhanced by machine learning models) that helps us understand what is happening in the sector. We will then use the data to design targets for the out-of-home sector aimed at improving health. **We will report our findings later in 2024.**

Our proposal for retailer targets

The rest of this briefing focuses on how health targets for retailers could be designed, implemented and enforced to reduce obesity.

Large retailers make up over [95% of the grocery market](#) and are the gatekeepers of the majority of what we eat.

As the major link between food producers and consumers, they hold considerable power and influence over the whole food system. They should be held accountable for the role they play in determining the health of the nation.

However, a mandatory targets policy must not be unduly burdensome for industry, nor detrimental to its bottom line.

For this reason, the key requirement of our work was that targets must lead to a reduction in total calories purchased, while not leading to a reduction in the total value of products sold.

Our research looked at a range of options for retailer targets, with a focus on assessing the best measures for improving health and reducing obesity. To do this, we have analysed food purchasing data from Kantar's Worldpanel Division,⁵ an international market research company. The dataset comprises food and drink purchases taken into the home in 2021 for a sample of approximately 30,000 British households, which we used to model the potential impact of targets on calorie purchasing and population obesity rates (see Box 1 or [technical appendix](#) for further detail of the analysis and modelling). Alongside this, we engaged with experts from the UK food industry (including some of the biggest retailers), policymakers, health charities and academia through interviews and a workshop to assess the feasibility of different target options. We also commissioned an economist to appraise the policy (see [economic assessment](#)), and sought legal advice from the legal firm Kingsley Napley LLP, which was incorporated within this note and the [implementation plan](#).

Box 1: summary of analysis and modelling approach (for more information, see [technical appendix](#))

1. We used 2021 food purchasing data from a representative sample of 30,000 British households to conduct our analyses. We used nutritional information and sales data to calculate retailer (branded and own brand) sales weighted averages for each health metric.
2. We weighted sales of food by the volume (in kilograms) of products sold. This approach is consistent with that used by the Office for Health Improvement and Disparities (OHID) in the calorie reduction programme and gives more influence to products with higher sales, while capturing changes in portion sizes and multipacks.
3. According to these assigned metrics we split the dataset into 'healthy' and 'unhealthy' products, with the definition of 'healthy' being dependent on the metric being used.
4. We then applied a range of percentage decreases in sales and nutrient composition shifts (reformulation) across unhealthy foods, alongside increases in sales of healthy foods, to model various scenarios by which businesses could achieve a given target.
5. Based on the outputs of these models, we chose a set of targets for retailers to meet that we considered both ambitious and achievable. We only chose scenarios where the total value of food sold did not decrease, and a significant reduction in calories was estimated.
6. Lastly, we modelled the estimated impact of these calorie reductions on the population excess weight distribution.

Identifying the best measure for health

We analysed multiple commonly used healthiness measures as part of our assessment.

Box 2: which metrics for food healthiness did we consider?

1. **Calorie density**, also known as energy density, is a measure of the calories per 100g of a product. High calorie dense foods (those with ≥ 400 kcal/100g) are generally considered unhealthy, for example, confectionery, although there are exceptions such as nuts, which are healthy calorie dense foods.
2. **Converted nutrient profiling model (NPM) score** is a holistic measure of health that assigns an integer score to food products based on their nutritional content (energy; sugar; saturated fat; sodium; protein; fruit, vegetables and nuts; and fibre). The NPM was originally developed to determine the suitability of products for advertising to children. In our analysis we have defined products as 'unhealthy' if they have a converted NPM score ≤ 62 .⁶
3. **HFSS** is a binary measure of a product's healthiness. Products with a converted NPM ≤ 62 and in scope of [HFSS regulations](#) are subject to this classification in our analysis. Since HFSS scores are based on NPM scores, industry will need NPM and calorie density data to categorise products in this way.

Based on our analysis, we recommend the introduction of an average NPM score-based target.

This measure has the optimal balance between impact and feasibility of implementation, as it is a more holistic measure of the health of food and is already established in legislation (see [technical appendix](#) for a full appraisal of health metrics). Retailers are already required to calculate NPM scores for many of their products to comply with [existing HFSS legislation](#). This target would be applied across a retailer's entire food product portfolio (for

branded and own brand) and sales weighted (see Box 1) to ensure that products that have a higher volume (in kg) of sales contribute more to average scores than those that are purchased less frequently and in smaller volumes.

While we are recommending an average NPM score, we believe that a calorie density measure would also work. A calorie density-based target provides a direct route to tackling obesity by incentivising a reduction in calories sold and modelling shows it can achieve the same impact as the NPM-based target. However, it is an unfamiliar metric to industry. It only considers improvements in a single element of food composition, unlike the NPM score, which captures a more holistic view of 'healthiness' and is the basis of existing legislation. It should be noted that if the targets were to be extended to the out-of-home sector, calorie density may be a more viable metric as large businesses are already required to calculate calorie information for their meals to comply with [calorie labelling legislation](#).

We ruled out implementing an HFSS-based target. A target aiming to reduce the proportion of a retailer's HFSS sales by applying a binary classification to products as either HFSS or non-HFSS limits its effectiveness, as it only incentivises improvements in products near the HFSS classification boundary and not in the most unhealthy products. Our modelling demonstrates that retailers would have to enact more extreme sales or reformulation shifts to meet such a target, potentially making the policy either too difficult to implement or not sufficiently impactful to justify its adoption. See the [technical appendix](#) for a detailed appraisal of the healthiness metrics.

The impact of retailer targets on obesity

Our aim is to have a significant impact on obesity, much greater than has been achieved by existing policies such as the Soft Drinks Industry Levy, which has been estimated to have reduced calorie intake among the population with excess weight by 28 kcal per person per day.⁷ We believe this policy could take us half the way towards our goal of halving obesity.

We have estimated that our retailer target could reduce calorie intake among overweight and obese populations by approximately 80 kcal per person per day.⁸

A sustained calorie reduction of this magnitude over a three-year period would lead to an approximate **23% reduction in the prevalence of obesity in the UK** (from 28% to 21%) and a 14% reduction in people living with excess weight (from 64% to 55%) (see [technical appendix](#) for more detail).⁹

This would translate to around four million fewer people living with obesity in the UK and around £20 billion in annual cost savings to society.¹

To achieve this impact, our modelling suggests that one would need to set the target at the following level (see Figure 3).¹⁰

Figure 3: proposed health target for grocery retailers

Retailers must improve their sales-weighted average converted NPM score to ≥ 69 (increased from the current average of 67).

This would be across their entire food product portfolio and achieved by 2030.

Importantly, we can achieve this level of impact by setting targets at a level that is similar to that already achieved by today's 'best' players.

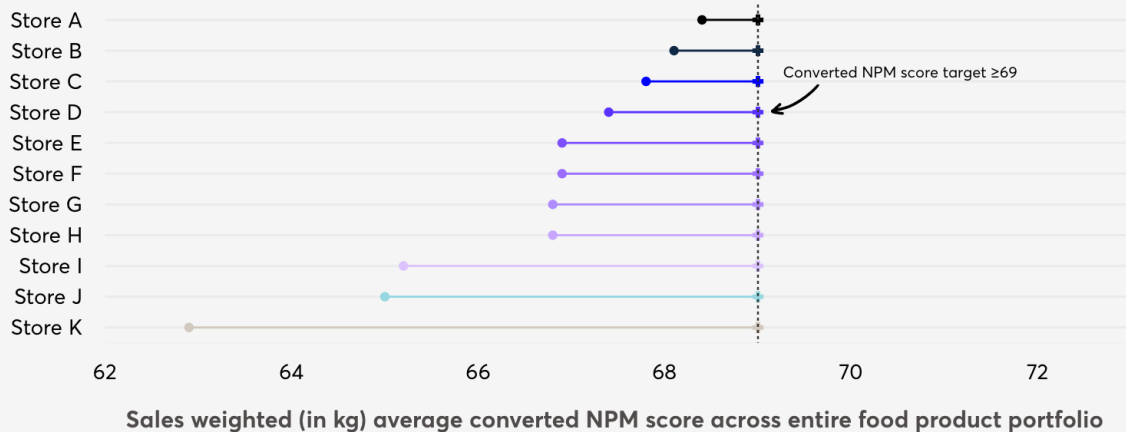
This approach not only seeks to achieve impact and parity across the sector, but also rewards those businesses that have already made significant efforts to prioritise health. Our proposed target is ambitious yet achievable. The level at which the target is set could be altered, although this would affect the scale of impact achieved. Figure 4 shows how retailers are currently performing against this target, and the scale of change required to achieve it.

Figure 4: target and current sales weighted (in kg) average converted NPM score by retailer

Some retailers are already close to the the converted NPM target, whilst others have further to go

Legend: + target ● current

11 largest GB retailers (anonymised)



Source: Nesta analysis of Kantar Worldpanel Division Data (2021)

nesta

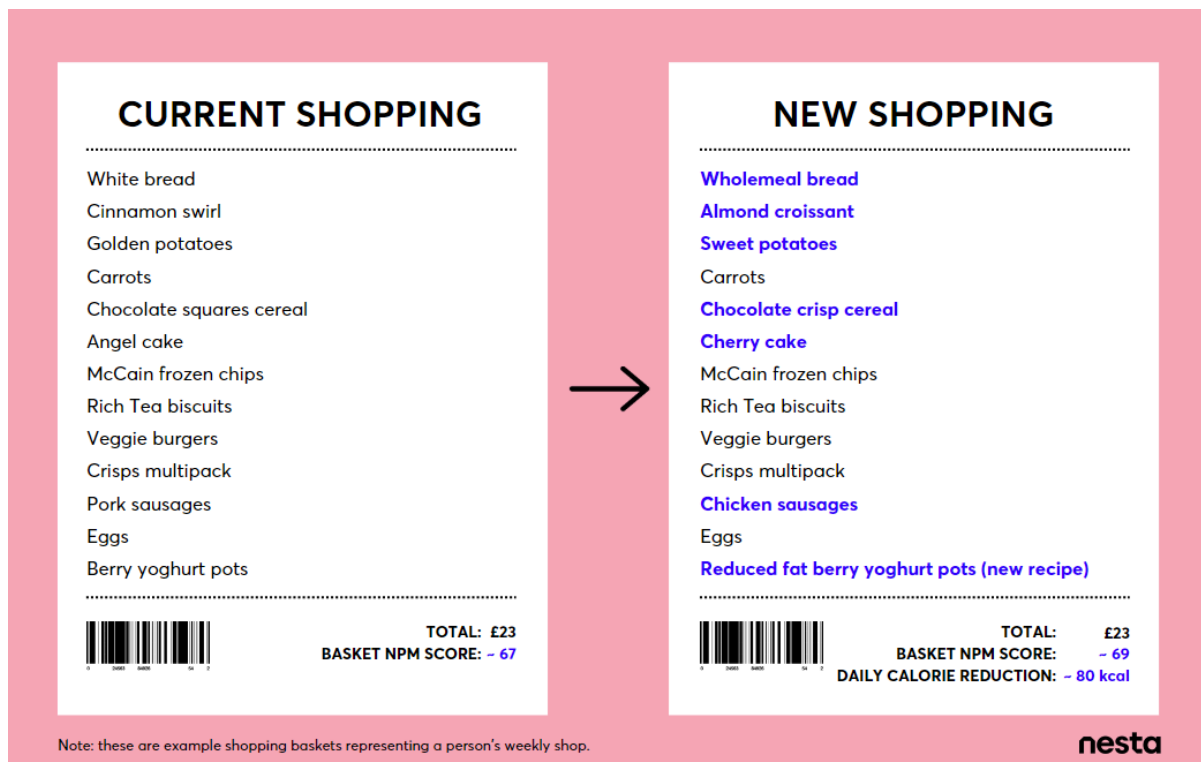
A key benefit of this policy is the flexibility it gives retailers to achieve targets through whichever mechanisms suit their business model.

In our modelling we have assumed that this would include a rebalancing of sales towards healthier food and product changes through reformulation or innovation (see [technical appendix](#)). We have only recommended options that do not reduce the total value of food products sold, to illustrate that it could be possible to implement this policy without impacting total sales. This is the best measure we have available for commercial impact.¹¹

The ambitious yet achievable level at which the target is set, and the flexibility retailers have to achieve targets, mean that consumers would experience minimal changes to their shopping in response to retailer activities, as shown in Figure 5. Importantly, as a result of retailers deploying their reformulation, stocking, promotion, placement and advertising mechanisms to make healthier foods the easiest option, consumers can make these changes with minimal willpower and at no extra cost.

The basket at Figure 5 is an illustrative example to show what a basket could look like, but this shift in sales could be achieved in numerous ways.

Figure 5: illustrative example of what small and positive changes could look like to a consumer's shopping following retailer action to meet targets



To appraise the broader economic costs of targets to retailers and consumers, we commissioned an [economic assessment](#) of the policy.

This assessment found that the proposed target should not have a significant impact on either the costs to retailers or the costs of consumers' shopping baskets.

This is particularly true when compared to other policies, such as new taxes, which are often passed through to the consumer to some degree. Business costs will be limited because retailers have the flexibility to adapt their existing practices and operations most cost effectively, such as making strategic stocking and marketing decisions, reformulating unhealthier products, or altering their store layouts. While the policy will incentivise businesses to modify these practices to prioritise health, it is not generally expected to

increase their overall cost if a suitable transition period is given. Furthermore, due to the highly competitive nature of the grocery retailer sector, where many retailers are already close to compliance with the target, it is unlikely that a business would pass on any costs that are incurred to the consumer. For more information, see the [economic assessment](#).

Ensuring maximum impact through implementation

For retailer targets to achieve their intended goal, they must be implemented effectively. We have developed an [implementation plan](#) for this policy, which is summarised below.

- **Mandatory.** We have seen that past voluntary action is insufficient. An industry-wide shift in retailer portfolios at the scale we need to see will only be guaranteed with a mandatory targets policy. Primary legislation would be recommended for the powers needed to implement, monitor and enforce this policy, and to allow compliance incentivised through penalties.¹² For more information on the legislation required for this policy, see the legal section of the [implementation plan](#).
- **Underpinned by mandatory data collection and reporting.** Transparent and industry-wide food data collection will be crucial to assess and monitor retailers against targets. This could build on existing work to establish appropriate metrics, data requirements and monitoring through the [Food Data Transparency Partnership \(FDTP\)](#). Data collection should be made mandatory to compel business to report consistently and comprehensively across all the required metrics. A range of supplementary measures should also be monitored to help identify any potential unintended consequences. These would include progress at regional and sociodemographic levels to monitor progress on health inequities, and total calories sold to ensure sales weighted averages are not increasing while total calories purchased increase.

- **Enforced by proportionate but sufficiently sized penalties to motivate compliance.** We recommend a penalty framework similar to that established for the [Groceries Supply Code](#),¹³ with a maximum penalty up to 1% of annual turnover, depending on the magnitude of non-compliance and efforts to comply. With sufficient lead time to enforcement, businesses would have time to make changes to their practices to achieve the targets and avoid the costs of fines. To foster innovation and progress, incentives such as innovation grants or a healthy retailer certification (similar to B Corp status) could be offered as a reward to retailers surpassing targets ahead of schedule.
- **Set at an absolute threshold.** To recognise retailers that have already made progress to improve their offer and to ensure retailers operate on a level playing field, targets should drive change to a single absolute value (≥ 69 for converted NPM score).
- **Effective at least one year after data collection is in place.** Data collection must begin before targets can be enforced. A transition period of at least one year should be provided between mandatory data collection and enforcement of targets, to establish reporting processes and allow businesses time to put plans in place to meet the targets. Legislation would outline targets that retailers are required to meet before or by a specified date. See [implementation plan](#) for detailed timeline.
- **Monitored and enforced by existing government bodies.** We propose that the Food Standards Agency (FSA) hold the powers to enforce the targets and impose penalties, leveraging its [main objective](#) to protect public health and consumer interests in relation to food. This would be an expansion of the current role of the FSA, which may also require additional enforcement powers to impose the size of penalty proposed (see the [implementation plan](#) for more information).

- **Only for large grocery retailers that sell directly to consumers.** We have classified the 11 largest UK retailers as in-scope of our targets, which collectively represent over 90% of in-home food consumption according to Nesta's analysis of Kantar data. This definition is similar to the statutory definition outlined in the [Groceries Supply Code](#) and acknowledges the significant operational capacity of these retailers to meet targets while aiming to mitigate the challenges smaller businesses might face under such a policy.

We urgently need to reshape our food system so that the healthier option is the easiest option for everyone, regardless of where you buy your food. By implementing ambitious yet achievable mandatory health targets for retailers, we can make real progress towards these goals and start turning the tide on obesity once and for all.

Endnotes

1. Calculation based on [Frontier Economics modelling](#) of £97.8 billion annual cost of adult obesity to society, which includes estimated costs from NHS, social care and lost productivity, and wider costs to the individual calculated using Quality Adjusted Life Years (QALYs) modelling.
2. The health metrics in our analysis were sales weighted by volume (measured in kilos). Sales weighting ensures that products that have a higher volume of sales contribute more to average scores than those that are less frequently purchased (see [technical appendix](#) for more detail).
3. Nesta calculation using [PHE 2015-2020 progress report](#) and [Amies-Cull et al \(2019\)](#).
4. The out-of-home food sector refers to businesses preparing and selling food that is ready for immediate consumption on or off the premises, and includes restaurants and takeaways.
5. All analysis and interpretation was conducted independently of Kantar Worldpanel. Kantar has not independently verified the findings.
6. We transformed raw NPM scores for the converted NPM target with a commonly used formula developed by the [University of Oxford](#), which involves multiplying the raw NPM score by -2 and adding 70. Using this formula, a raw NPM score of 4 is equal to a converted NPM score of 62 (the threshold for a low converted NPM score, HFSS and 'unhealthy' classification). We have referred to this scaled NPM score as a 'converted NPM score' (see [technical appendix](#) for more details).
7. Derived from an [Institute of Labour Economics study](#) that estimated the levy is responsible for a reduction in intake of just under 6,500 calories from soft drinks per annum (or 18 calories per day) per UK resident, which we have upscaled to apply to the population with excess weight (based on [HSE 2019 data](#)).

8. Our model assumes that calorie purchases will only change for the excess weight population (people living with overweight, obesity and severe obesity). Across the whole population, we estimated an average decrease in calorie purchases of 50 kcal per person per day (see [technical appendix](#) for more detail).
9. An 80 kcal reduction can reduce obesity prevalence by 23% despite 216 calories being required to halve obesity because of the non-linear relationship between calorie deficits and population obesity prevalence, meaning progressively larger calorie deficits are needed for larger shifts of the BMI distribution (see [technical appendix](#) for more detail).
10. The impact on obesity from a target set at this level would vary depending on the degree to which retailers prioritise calorie density reduction to meet the NPM target. Retailers could also choose to improve their NPM scores by improving other nutrient components of products, such as salt or fibre, reducing the impact on obesity but still producing similarly significant public health improvements (see [technical appendix](#) for more detail).
11. We recognise this is an imperfect proxy measure as it does not consider relative profit margins of different products as we did not have access to this data. It also assumes that reformulation has no impact on demand nor price of a product (see [technical appendix](#) for more detail).
12. It may be possible to implement aspects of this policy proposal by secondary legislation, including which retailers should be in scope, mandatory data collection and an enforcement element. However, this is not recommended because of its increased vulnerability to legal challenge, parliamentary scrutiny and the uncertainty that powers under existing Acts will carry the full extent of required regulation. We commissioned independent legal advice on the legislation required for this policy proposal. See [implementation plan](#) for more detail.

13. The [Groceries Supply Code of Practice](#) establishes the rules for how grocery retailers can engage with their suppliers, to ensure that competition in the grocery sector is maintained and all businesses are engaging in fair and lawful dealing.