



BRIEFING

REFORMULATION

OBESITY ACTION SCOTLAND

August 2019

KEY POINTS

- Reformulation means changing the proportions and content of ingredients in processed food and drink. To promote a healthy diet, reformulation requires reductions in sugar, salt, saturated fat, and calories, plus increases in fibre. These changes could be progressed by a company or through national action
- Reformulation is a demonstrably cost-effective way for the Government to reduce obesity levels
- Early signs of improvement have been seen with the mandatory Soft Drinks Industry Levy, with an equivalent of over 45,000 tonnes of sugar removed from these products
- Scotland is not achieving its dietary goals for total fat, saturated fat, sugar, salt, fruit and vegetables, oily fish, and wholegrain. Reformulation could powerfully contribute towards a healthier, more balanced diet
- Public Health England (PHE) has introduced reformulation programmes for salt, and more recently sugar and calorie content of food and drinks popular among children
- Mandatory approaches to reformulation would provide a “level playing field” for businesses
- Both the Scottish and UK Governments have given their support to mandatory action if the voluntary reformulation targets are not successfully met

KEY ACTIONS

Reformulation requires substantial actions across industry, retail and out-of-home sector

The voluntary reformulation programme should be closely monitored and evaluated for success

Where voluntary measures are not working, a clear, mandatory and supportive framework for reformulation with time-bound targets and sanctions for non-compliance is required

Why Address Reformulation?

- Scotland's obesity rates are amongst the highest in the world; latest figures show that 65% of adults in Scotland are overweight and 29% have obesity. 26% of children are at risk of being overweight and 12% are at risk of obesity.¹ Reformulation, whether voluntary or regulated, is one of the ways that manufacturers can help consumers lower their sugar, salt, fat and overall calorie intake, contributing to a healthy weight population.
- The average diet in Scotland is not in line with current Scottish Dietary Goals, with people in Scotland eating too much sugar (14.4% of daily energy vs recommended less than 5%), total fat (38.9% vs recommended 35%) and saturated fat (15% of energy vs the goal of less than 11%) and salt (7.7g vs 6g), and not enough fruit and vegetables (3.2 portions vs 5 portions), oily fish (34g a week vs 140g a week), and fibre (15.6g vs 30g).^{2,3}
- In the UK overall, although latest National Diet and Nutrition Survey (NDNS) figures show a slight decrease in free sugar consumption, all age groups still exceed the 5% recommended free sugar intake.⁴
- In Scotland, chips, cakes and pastries are amongst the most common foods purchased outside the home.⁵ As these foods are high in calories and in Scotland we consume up to 25% of our calories eating outside the home,⁶ a reduction in caloric content of food in the out of home sector could substantially reduce overall calorie intake.
- The McKinsey report 'Overcoming Obesity' highlighted reformulation as one of the most cost-effective ways to reduce obesity levels, second only to control of portion size.⁷
- Researchers from the University of Oxford assessed the potential impact of reformulation of salt, sugar and portion sizes in England. They found that by 2025, 26,000 deaths could be avoided, and 32,000 disability-adjusted life years saved to diabetes, if only 39% of the food industry reformulated their products.⁸
- Previous reformulation efforts have been successful. The salt reduction programme has delivered a gradual reduction in salt content in many processed foods, resulting in a 15% reduction in 24-hour urinary sodium over 7 years.⁹
- Where voluntary efforts have failed, mandatory measures have shown early signs of success. The recent Soft Drinks Industry Levy encouraged over 50%¹⁰ of soft drinks manufacturers to lower the sugar content of their drinks prior to the implementation of the levy, in order to avoid paying extra tax.



Current Approach

SUGAR REFORMULATION

PHE's role, following the publication of the UK Governments plan for childhood obesity, was to implement a sugar reduction programme and conduct a review of the current UK Nutrient Profiling Model (NPM), which categorises food and drink by its nutritional content. In March 2017, PHE published the report 'Sugar Reduction: Achieving the 20%', which highlighted their approach to reformulation and industry guidelines for achieving the sugar reduction target of 20% by 2020.⁶ An interim target of 5% sugar reduction was set for the first year of the programme. Analysis of the first-year progress showed that although some areas of industry had reached this target e.g. yogurts and breakfast cereals, overall only a 2% reduction has been achieved so far.¹¹

In 2018, PHE carried out a review of the NPM on behalf of the Department of Health, with outcomes of the review and consultation published in June 2018.¹² The UK NPM is now over 15 years old, and it does not reflect the current UK dietary recommendations, particularly for free sugars. There have yet to be any actions taken as a result of the review.

CALORIE REFORMULATION

PHE also oversee a wider reformulation programme focusing on overall calorie reduction of products. In March 2018, they published a report 'Calorie reduction: the scope and ambition for action' in which they highlighted the evidence that demonstrates that habitual overconsumption of calories can impact significantly on weight gain.¹³ Their analysis showed that an excess of 140-500 calories a day was consumed by children with overweight or obesity, whilst in adults this figure was around 200-300 excess calories per day. The calorie reduction programme sets a target of a 20% reduction in calories by 2024 for the product categories that contribute the most to children's calorie intake. This requires significant action by retailers, manufacturers and the 'Out of Home' sector, and could be achieved by product reformulation or portion size reduction.

If successful, such calorie reduction is projected to save the NHS in the UK £4.5bn over 25 years in healthcare costs, with wider social care savings of an additional £4.48 billion.¹³

SALT REFORMULATION

The UK salt reduction programme has been running successfully since 2003/2004, delivering substantial reductions in salt content in many processed foods, resulting in a 15% reduction in salt consumption (measured as 24-hour urinary sodium).⁹ One of the most crucial components was strong leadership from the Food Standards Agency (FSA). Several countries now follow the UK's lead in their salt reduction programme.

Originally published in the UK Governments Responsibility Deal (RD) in 2014, a report on salt reduction targets by PHE highlighted the targets for 2017.¹⁴ The report provided individual targets for each category and sub-category of products included in the reformulation plan, as well as 'per-dish' targets for eating out of home. In December 2018, PHE published a progress update on these targets. Mixed results were found, with barely 50% of average targets being met. In the Out of Home sector, 7 in 10 products did not exceed maximum targets.¹⁵ However, for meat products, over 4 in 10 products still exceed the maximum targets set.

Secretary of State for Health and Social Care, Matt Hancock, set out goals for further salt reduction in his 'Prevention Vision' in 2018. He highlighted that salt intakes of 8g/day in the UK still exceeded the goal of a maximum intake of 6g/day in adults and much less in children. Meeting this goal could save the NHS over £570m each year¹⁶ and prevent many thousands of strokes, heart attacks and stomach cancers.¹⁷ Published in July 2019 a green paper set out an ambition to reduce the population's salt intakes to 7g per day.¹⁸ It included a commitment to publish revised salt reduction targets in 2020 for industry to achieve by mid mid-2023 and reporting on industry's progress in 2024. It also committed to influencing consumer behaviour through marketing, providing advice and commissioning a urinary sodium survey in 2023 to measure progress.¹⁸

COMPANY-SPECIFIC APPROACHES

Some companies already have their own targets for reformulation.

- In 2015, **Kellogg's** set out their own sodium and sugar reformulation targets for 2020, which they achieved in 2016. They have announced that they will be further reducing salt and sugar in many of their top breakfast cereals.¹⁹
- **Unilever** has reformulation targets for sugar, salt and fat, and have pledged that by 2020 they will have lowered salt levels in 75% of their products, making the global target intake of 5g salt per day more achievable.²⁰
- The European Journal of Clinical Nutrition published an evaluation of the **Nestlé** Nutrient Profiling System, which showed 10% reduction of energy per serving in 6 of the 8 categories investigated, without altering portion size.²¹ The study also reported reductions in sodium and sugar, by 22% and 31% respectively, as well as reductions in fat and saturated fat content.



The Soft Drinks Industry Levy

The Soft Drinks Industry Levy (SDIL), also known as the 'sugar tax', was proposed in 2016 and implemented in 2018.²² It was designed to target soft drinks as one of the largest contributors to free sugar intake in children's diets. Manufacturers now pay 24p/L if a drink contains more than 8g of sugar per 100ml, or 18p/L if it contains 5-8g per 100 ml.¹⁰

Following the introduction of the levy, sugar in own-brand and manufacturer-branded soft drinks has fallen 11% per 100ml.¹¹ According to the green paper an equivalent of over 45,000 tonnes of sugar has been removed from these products thanks to the levy.¹⁸ In order to avoid the levy, more than half of manufacturers reduced the sugar content of their soft drinks¹⁰ prior to implementation, with one leading supermarket halving sugar content in its own-brand drinks.²³

While this reduction of sugar content in soft drinks is encouraging, it does not mean that sugar consumption is reducing overall in Scotland. Foods Standards Scotland (FSS) pointed out that while purchase of SSBs had decreased from 2010 to 2016 this has been offset by an increase in sugar purchased from other foods.²⁴ The SDIL shows that mandatory measures are often required for industry to take action.

Scotland's Out of Home Strategy

Following the Scottish Government's proposal to develop a Scottish 'Out of Home' strategy, in November 2018, FSS consulted on the approach needed to tackle the Out of Home environment. Part of the proposals is to reduce fat, sugar, salt and overall calorie content and increase fibre and fruit and vegetable content.²⁵

Several of the suggested approaches focus on reformulation, including proposals to restrict menu items containing large amounts of calories, and replace energy dense foods with lower energy foods.²⁵ Both actions would involve replacing fats and sugars with fruit and vegetables. The consultation closed on the 28th February 2019 and responses will help shape recommendations to the Scottish Government in the development of their Out of Home strategy.

Public Opinion

- In the report 'Public attitudes to reducing overweight and obesity in Scotland' by NHS Health Scotland, over 90% of survey respondents felt that cheap fast food was too readily available.²⁶
- In the Food Standards Agency's November 2018 Biannual Public Attitudes Tracker, the 'wider food issue' most concerning to the public was the amount of sugar in food (it was a concern for 50% of respondents).²⁷ This was the biggest rise for any concern tracked in the survey, increasing from 39% in 2010. 40% were also concerned about levels of salt in food, whilst 37% were concerned about levels of saturated fats.
- Over 80% of respondents supported introducing limits to the levels of salt, sugar and fat that manufacturers should be allowed to add to products.²⁷
- In a poll by Diabetes UK, 75% of British adults supported reformulation of products containing salt, sugar and saturated fat.²⁸ This support was seen across all socioeconomic groups.

Sugar and Salt Replacements and Potential Unintended Consequences

Sugar removed from food and drinks in European countries may be replaced with European Food Safety Authority (EFSA) approved no/low-calorie sweeteners to enhance the flavour. Although no/low-calorie sweeteners are deemed safe for use, some concerns about the long-term health implications of continued use have been highlighted, e.g. that they may stimulate appetite causing weight gain or impact on metabolic health in children.²⁹ PHE found that evidence was inconsistent and highlighted that evidence from the Scientific Advisory Committee on Nutrition (SACN) Carbohydrate and Health report showed less weight gain in individuals consuming soft drinks with low calorie sweeteners, than sugar-sweetened drinks. PHE has endorsed the use of sweeteners as a replacement for sugar.⁶ However, others take a different position. American Heart Association's Science Advisory on low-calorie sweeteners and cardiometabolic health concluded that on the basis of available evidence it was prudent to advise against prolonged consumption of low-calorie sweetened beverages by children and encourage focus on water as a replacement for sugar sweetened beverages.³⁰ UK's Soil Association also took a stronger stand:



schools that are awarded Food for Life catering mark cannot serve any products or use ingredients that contain sweeteners (E950 acesulfame K, E951 aspartame and E954 sodium saccharin) mainly because this maintains preference for sweet flavours.³¹

In 2017, SACN and the Committee on Toxicity (COT) released a joint statement addressing concerns of the health risks of replacing sodium with potassium in UK foods.³² When SACN was originally asked by the UK Department of Health to advise on this issue in 2013, they did not make recommendations of such replacements, due to the perceived risk in specific individuals with undiagnosed kidney disease. They also believed that reducing the taste for salt completely would prove more effective. In certain situations, however, sodium has a function within foods that makes it difficult to replace.

In order to achieve the voluntary targets, the food industry asked for replacing sodium with potassium to be reviewed. The new analysis found both health benefits and risks associated with it. Health benefits that the replacement of sodium with potassium could provide included reduced blood pressure and stroke, whereas potential risks included an increase in fatalities caused by hyperkalaemia in those with undiagnosed kidney disease. Overall, SACN and COT concluded that the benefits to the overall population outweighed the risks. They recommended that the UK Government encourage manufacturers to try using potassium as a replacement, reviewing the recommendation if any changes to the risk-benefit analysis become apparent.³³ Following the publication of the SACN and COT report, Action on Salt, World Action on Salt and Health, and Blood Pressure UK released a joint position statement supporting the recommendations.³²



Policy Position

Public Health England has introduced a sugar and wider reformulation programme that aims to engage all food industry stakeholders to voluntarily reduce sugar and calories in the top 9 categories that contribute most to children's food intakes. They are also continuing with their salt reduction programme. PHE have committed to displaying transparency by monitoring and reporting on the progress made in all reformulation areas.

The Scottish Government welcomed PHE's reformulation plans, but highlighted that with encouragement aimed at larger companies, Scotland's small and medium-sized enterprises (SMEs), which make up 95% of Scottish food and drink companies must also be encouraged to take part. The Scottish Government has pledged to invest £200k over three years to help with this effort.³⁴

They have also urged the UK Government to include sugar sweetened milk-based drinks and dissolvable powders in the SDIL, if the PHE reformulation target of 20% by 2020 is not reached. In addition, they support further action by the UK Government, if calorie reformulation targets are not met.³⁴

The UK Government published 'Childhood obesity: A plan for action, chapter 2' in 2018.³⁵ In this, they restated their aims to reduce sugar in products by 20% by 2020. They announced that they would pursue regulatory and fiscal measures, if the industry does not comply with voluntary measures, and if targets are not met. The most recent green paper did not include such commitment but suggested possible extension of the SDIL to sugary

milk drink drinks.¹⁸ The green paper also announced an ambition to reduce the population's salt intakes to 7g per day. The UK Government additionally pledged to introduce legislation on calorie labelling in the Out of Home sector in England to reach their calorie reduction target of 20% by 2024. A consultation was held on the extent of these measures in 2018.³⁶

The Health Select Committee commended the UK Government on the introduction of the SDIL and progress so far but urged them to include milk-based drinks in the levy. Again, they recommended a clear consequence of a regulatory framework, if the industry did not uniformly respond to the voluntary programme, to be effective at reducing childhood obesity levels.³⁷

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