



Public Health
England

Sugar reduction

Responding to the challenge

About Public Health England

Public Health England's mission is to protect and improve the nation's health and to address inequalities through working with national and local government, the NHS, industry and the voluntary and community sectors. PHE is an operationally autonomous executive agency of the Department of Health.

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Executive summary

Eating too much sugar is bad for us. This paper outlines the steps PHE will take to help families and individuals to reduce their sugar intake and how we study possible initiatives to further reduce sugar consumption. This will allow us to meet the Department of Health's request that we provide them draft recommendations in spring 2015 to inform the government's thinking on sugar in the diet. We will do this work in the light of the Scientific Advisory Committee on Nutrition's report on carbohydrates, which has been published in draft form and will be finalised by the end of the year.

People eat more sugar than they should. Current intakes of sugar for all population groups exceed recommendations set by the Committee on Medical Aspects of Food Policy (COMA) for the UK in 1991¹. Its recommendation is that on a population basis, no more than 10% of the average total energy intake should be consumed as sugarⁱ.

More than two-thirds of adults and, by the time they leave primary school, one in three children are carrying excess weight. Improving diet and specifically rebalancing calorie intake must be a top priority.

Evidence shows diet and obesity related diseases including cardiovascular disease and some cancers cost the NHS alone at least 11 billion pounds per year², and are major contributors to health inequality, with the most deprived being most at risk.

People's health would benefit if average sugar intakes in England were reduced. Sugar increases the risk of consuming too many calories, which, if sustained, causes weight gain and obesity.

This document outlines how PHE will prepare evidence and advice for government. We also set out the actions we are undertaking now, and those we will take in the near future to help reduce sugar intake. Our work plan builds on our expertise and experience in diet, obesity and marketing and on conversations with stakeholders including academics, consumer groups and industry representatives.

ⁱ Definitions of sugar vary. In this paper the term 'sugar' includes all sugars outside the cellular structure in foods and drinks excluding those naturally present in dairy products. This includes sugar added to foods, plus the sugar in fruit juice and honey. It does not include the sugars naturally present in intact fruit and vegetables or dairy products.

Our plans include:

- immediately launch a digital marketing package to help families and individuals reduce their sugar intakes followed by a focused national behaviour change campaign on sugar reduction in January 2015
- a refresh of the “5 a day” campaign, including a reconsideration of our advice on fruit juice and smoothies and an assessment of how “5 a day” might apply to composite dishes (such as ready meals)
- advice to government departments, industry, non-governmental organisations and others regarding any necessary revisions to nutrition messaging in light of SACN’s finalised advice on carbohydrates and health (expected in late 2014/early 2015). Further work to revise our key dietary messaging and improvement tools, such as the “eatwell plate”, advice on catering and Change4Life messaging may follow
- evidence reviews and further analysis to allow in-depth consideration of the possible initiatives we have already identified as key areas for future discussion. These include advertising of foods to children, fiscal measures that relate to sugar-sweetened drinks, the role of the food industry, food procurement across the public sector, and education and training
- supporting the Department of Health in its work with the food and drink industry.

The evidence gathered and in-depth considerations alongside SACN’s finalised recommendations will be used to provide recommendations to the Department of Health to inform government’s thinking on sugar in the diet in the spring of 2015.

To enhance our understanding, share our thoughts and develop our ideas we will continue our conversations with stakeholders about how to reduce sugar intakes, including further listening events and discussion forums, as this programme of work moves forward.

We will provide further updates on our work as it emerges and look forward to working in partnership with the wider public health community and other stakeholders to improve the nation’s diet.

Sugar in diets today

In 1991 the Committee on Medical Aspects of Food Policy (COMA) recommended that no more than 10% of the population's average total energy intake should be consumed as sugar¹. This is equivalent to 11 to 14 level teaspoons of sugar a dayⁱⁱ.

Since then a wealth of evidence has been published in relation to sugar and health. Both the World Health Organization (WHO)³ and PHE's own expert advisory committee, the Scientific Advisory Committee on Nutrition (SACN), has now reviewed the evidence base, drawn draft conclusions and proposed new recommendations on sugar intakes⁴.

SACN is now undertaking a consultation on its draft findings (see page 12). The committee is considering a downward revision of the current recommendation on sugar. Once this is finalised, in late 2014/early 2015, PHE will provide recommendations to the Department of Health on any changes to dietary messaging that may be needed.

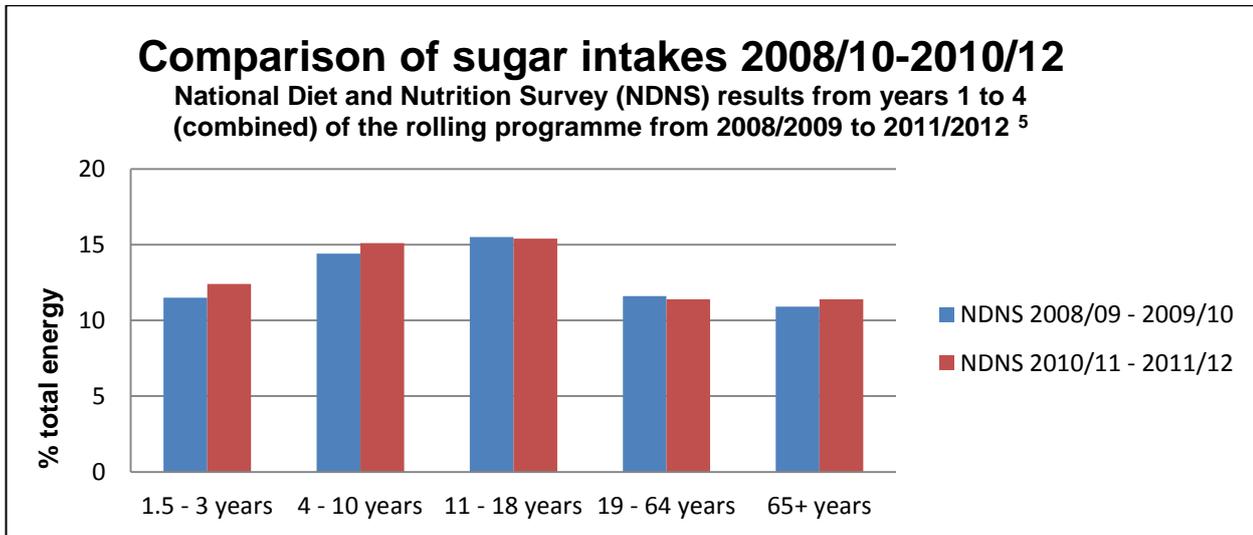
In the meantime, the nation's sugar intake remains above existing recommendations. The recent National Diet and Nutrition Survey published in May 2014 reported on food consumption and nutrient intakes for the UK⁵. The findings confirmed that the UK population as a whole is consuming too much saturated fat and salt, and not enough fruit and vegetables, oily fish and fibre. It also found that sugar intakes in all age groups are in excess of current UK recommendations.

Teenagers' intakes are the highest of all groups and they consume 50% more sugar on average than is currently recommended. Intakes of sugar for adults tended to be higher in the lowest income groups.

National Diet Nutrition Survey data also suggests that since 1991 (when COMA made its recommendations on sugar), sugar intakes have reduced in children under 11 years⁶. A comparison of sugar intakes in 2008/2010 with those in 2010/2012 however, shows no evidence of a further fall in sugar intakes in more recent years⁵ (see Figure 1), suggesting that efforts now may need to be increased.

ii Calculated using Estimated Average Requirement values for energy.

Figure 1. Comparison of sugar intake



Intakes of sugar as a percentage of total energy intake 2008-2012

- children aged 1½-3 years: 11.9%
- children aged 4-10 years: 14.7%
- children aged 11-18 years: 15.4%
- adults aged 19-64 years: 11.5%
- adults aged 65 years and over: 11.2%

The latest data from the National Diet and Nutrition Survey (2008/09 to 2011/12)⁵ shows that average sugar intakes exceed current recommendations in all age groups. For adults, sugar intakes were generally higher in groups with the lowest incomes.

The main sources of sugar in the diet are soft drinks; table sugar and preserves; confectionery; fruit juice; alcoholic drinks; biscuits; buns, cakes, pastries and fruit pies; and breakfast cereals. The contributions for adults, teenagers and younger children are shown in Table 1.

Soft drinks, including energy drinks, are the largest single source for teenagers. For younger children soft drinks, confectionery and fruit juice are the major sources of sugar. In adults table sugar and preserves and soft drinks are the main sources.

Table 1: Contributors to sugar intake National Diet and Nutrition Survey data (2008 to 2012)

% contribution to sugar intake	Adults	Teenagers	Children 4-10 years	Young children 1½-3 years
Soft drinks	16	30	17	12
Biscuits	6	7	8	8
Buns, cakes, pastries and fruit pies	7	6	9	6
Puddings	2	2	3	3
Table sugar & preserves	17	8	7	7
Confectionery	9	13	14	12
Fruit juice	8	10	13	14
Alcoholic drinks	10	2	-	-
Breakfast cereals	6	6	8	6

Why is sugar reduction so important?

There are two clear reasons why we need to be concerned about excess intake of sugars – excess body weight and tooth decay.

Obesity

Evidence shows that energy dense diets such as those that are high in sugar can contribute to excess calorie intake, which if sustained leads to weight gain and obesity⁷. If an individual is overweight or obese they are more prone to a range of serious health problems. These include cardiovascular disease; type 2 diabetes; endometrial, breast and colon cancer⁸; as well as psychological and social problems such as stress, low self-esteem, depression, stigma, prejudice and bullying.⁹

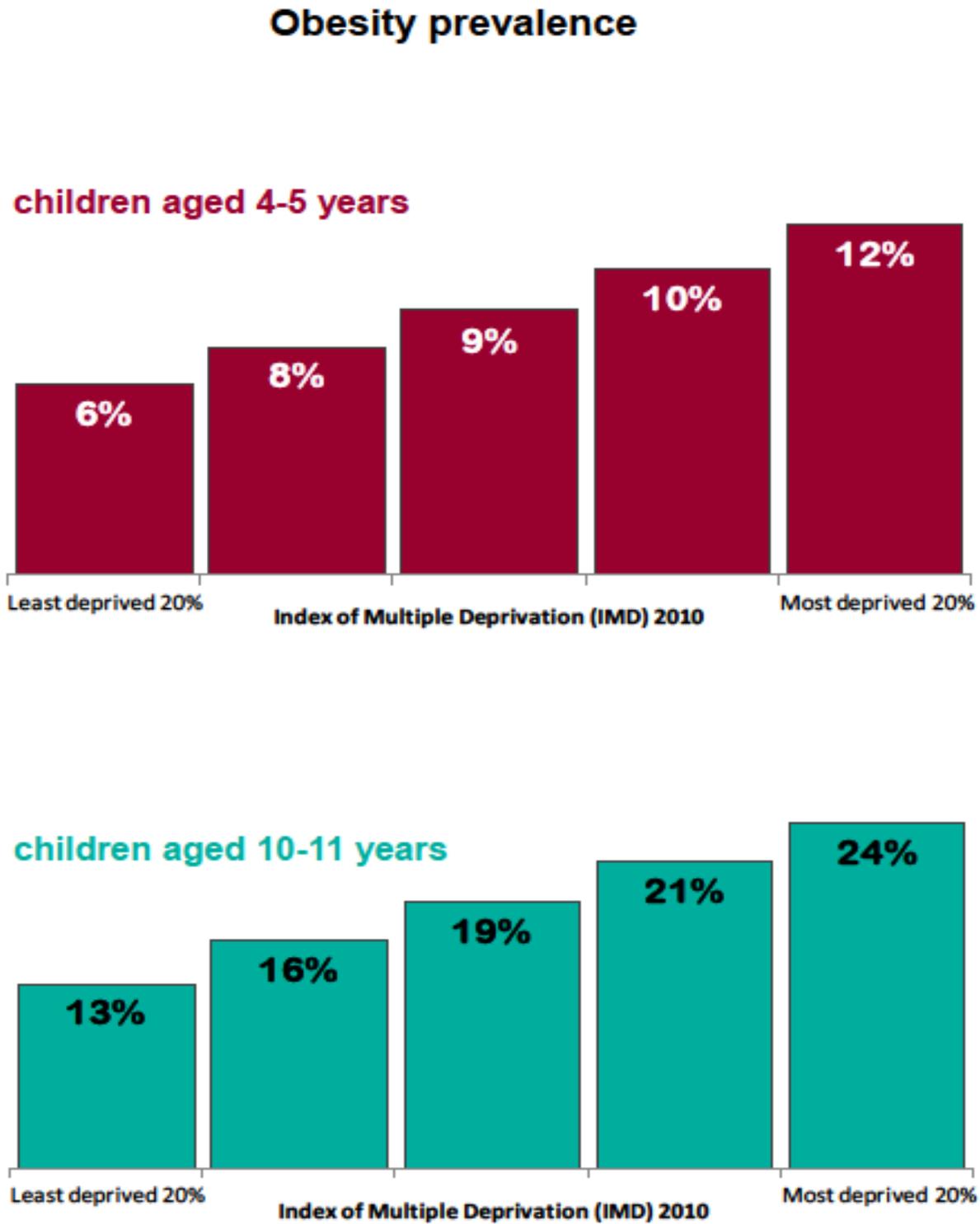
The average person in England is now overweight. In 2012 two-thirds of adults were overweight or obese¹⁰. In children, the situation is particularly worrying with one in five children aged 4-5 years and one in three children aged 10-11 years being overweight or obese¹¹. Children who are overweight or obese are more likely to develop illnesses such as type 2 diabetes¹², go on to experience weight and health problems in adolescence, and are more likely to become overweight or obese adults¹³.

There are stark health inequalities in patterns of excess body weight across England, particularly for children. Among women and children obesity tends to be most prevalent in deprived populations. Among children aged 4-5 years and 10-11 years, obesity prevalence in the most deprived tenth of the population is approximately twice that in the least deprived tenth¹¹ (see Figure 2).

Population level surveys of dietary intake during the period of rising levels of obesity suggest that energy intakes have decreased. The bulk of evidence, however, indicates that diet plays a pivotal role in the obesity epidemic, in addition to physical inactivity¹⁴. There are considerable challenges in collecting robust dietary intake data and it cannot be concluded with certainty that energy intakes have decreased. Only a very small excess in calorie intake over time leads to weight gain, and obese people have a tendency to under-report food consumption more than healthy weight individuals¹⁵. This means that body weight trends in England may lead to a systematic bias in reported trends in calorie and macronutrient intake.

Long term trends in take-home purchasing habits for all food and drink analysed by total sugar content (including sugar from fruit and milk) show that amount of sugar provided by take home food purchases has increased each year since 2005. This should, however, be taken in context of an increase in overall food purchasing¹⁶.

Figure 2. Obesity prevalence in England



Data source: National Child Measurement Programme 2012/13
Child obesity: BMI \geq 95th centile of the UK90 growth reference

Our best estimates are that the average man and woman in England consume respectively approximately 300 and 200 calories a day more than they would need were they of a healthy body weight.ⁱⁱⁱ This is roughly equivalent to consuming four chocolate digestive biscuits (330 calories) or a 500ml standard bottle of sugar-sweetened carbonated drink (170 calories).

Oral health

Oral health is an integral part of overall health. When children are not healthy this affects their ability to learn, thrive and develop¹⁷. Consumption of foods high in sugar can lead to tooth decay¹⁸.

In 2012 almost one-third of five-year-olds in England had tooth decay. There are also stark inequalities across the regions; for example, 21.2% of five-year-olds had tooth decay in South East England compared to 34.8% in the North West of England, with even greater inequalities within local authority areas¹⁹.

Addiction

Many foods and drinks that people regularly consume can be high in sugar. That occasional sweet or sugary drink can soon become a daily habit without people realising. People often reward themselves and their families with sugary food as a treat. However, PHE is not aware of evidence that indicates sugar is addictive in the same way as tobacco, alcohol and other drugs of abuse. The sugar addiction hypothesis is largely based on feeding studies conducted in animals and findings from these studies cannot be generalised to the complex eating patterns of humans.²⁰

Draft advice from the Scientific Advisory Committee on Nutrition

On 26 June 2014 SACN published its preliminary advice on sugars as part of a draft report on carbohydrates and health prepared in response to a request by government. The terms of reference for its work, the full draft report (including its preliminary conclusions and advice) and details of how to respond to the consultation can be found at www.sacn.gov.uk. The committee has considered, in accordance with its remit, only scientific aspects of the issue. The committee is now asking for comments of a scientific nature on its draft report.

ⁱⁱⁱ Calculated as the difference between the estimated energy requirements for men and women at current mean body mass index (27.3kg/m² and 27kg/m² respectively), based on weight and height data in England and the population Estimated Average Requirement values for energy, which were calculated using a body mass index of 22.5kg/m² (ie healthy body weight consistent with long-term good health).

Once SACN's consultation closes, the committee will consider responses, review its draft findings and finalise its report, which will be passed to PHE. PHE will then consider its recommendations to the Department of Health and propose any necessary amendments to government nutrition advice. It is only when this process has been completed that the current COMA 1991 recommendations on sugar may be replaced.

Summary

The case for a reduction in the nation's sugar intake is clear. It is likely to bring about a reduction in the risk of calorie imbalance, weight gain and obesity and the associated health, well-being and dental health problems.

Reducing sugar consumption, particularly in the most disadvantaged groups in society, is also likely to improve health equality, have a positive impact on the nation's mental health and wellbeing, and save costs to the NHS and local authorities by reducing social care costs. The most recent estimates are that excess body weight and poor dental health costs the NHS alone £4.7 billion²¹ and £3.4 billion²² a year respectively. The social care costs of these conditions, which will fall to local authorities, are difficult to estimate, but are likely to be significant. NHS costs attributable to overweight and obesity are projected to reach £9.7 billion by 2050, with wider costs to society estimated to reach £49.9 billion per year²³.

What is PHE doing?

Work to reduce sugar intake sits within PHE's wider programme of work to tackle obesity and improve diet. Obesity prevention and treatment services are being delivered and supported by others, including the Department of Health, local authorities, the NHS, non-governmental organisations and industry. This encompasses diet and physical activity interventions.

PHE's work on obesity is part of the government's "call to action"²⁴, which aims to tackle obesity on a broad front by supporting people in making healthier choices through initiatives like school food standards and promoting active travel. Local communities have been given ring-fenced public health funding and government is working with business and industry through the Responsibility Deal to take calories out of the nation's diet. PHE supports this "broad front" approach, and recognises that there is no "silver bullet" to reduce obesity. While working to reduce sugar consumption is an important strand it should be placed within this wider government approach.

Change4Life

PHE has had great successes in its consumer messages and behaviour change work. The social marketing programme Change4Life²⁵ uses a range of media to support families to make a positive change to their diets and activity levels.

In January 2014 a Change4Life Smart Swaps campaign encouraged families to choose one small swap to make their everyday diet healthier, such as swapping sugary drinks to "sugar-free", "diet", "no-added-sugar" drinks, milk or water. This sugary drinks swap was heavily promoted throughout January through television advertising, partner promotions, digital communications and a six-week digital support programme enabling people to see how much sugar they had saved and to record their progress. The campaign was carefully designed to influence every step of purchasing and consumption. The campaign generated unprecedented support from a wide range of commercial partners. Purchase data showed an 8.6% reduction in purchasing of carbonated sugary drinks during the campaign compared to the same period in the previous year²⁶.

Sugar reduction: Responding to the challenge

Sugary Drinks Swap



Based on 3.1g sugar cubes



Other activities

Examples of other activities being carried out by PHE, government departments, local authorities and the food industry are summarised in Appendix 1. They range from local education and marketing initiatives to encourage healthier eating, to restricting choice through mandatory standards applied to the foods on offer in schools (these standards apply to the majority of schools in England)²⁷.

Appendix 1 also includes a range of recent initiatives undertaken by the food industry to improve diets that specifically relate to sugar. Figure 3 below describes the approaches member companies of the Food and Drink Federation have used to help improve food choice.

Figure 3. Some approaches used by the food industry to reduce calories under the government’s Public Health Responsibility Deal calorie Reduction Pledge²⁸

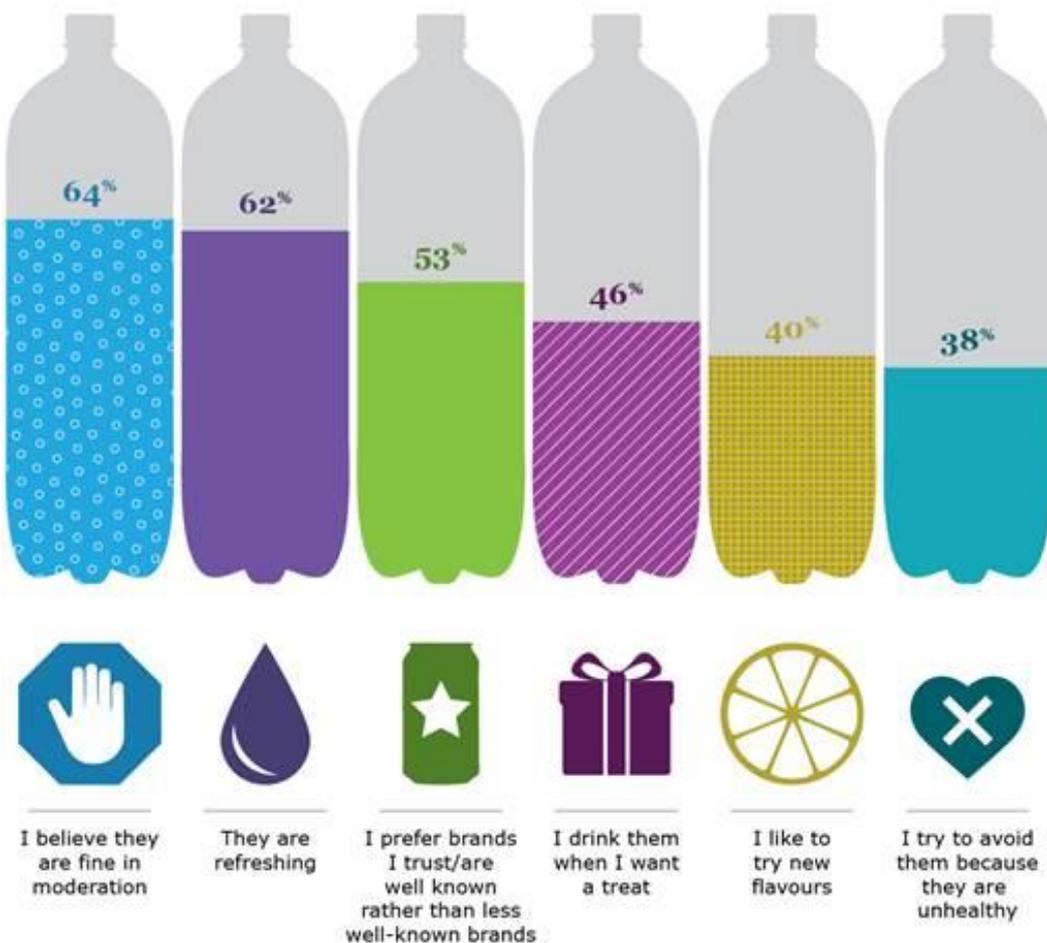


Next steps

PHE is committed to reducing intakes of sugar in all population groups. To do this PHE needs to help people to choose to eat less sugar and to help make it easier for them to do so. We know from our own insights research²⁹, carried out to inform our marketing work, that:

- people can be shocked by the amount of sugar and fat found in everyday food and drinks, and this can prompt them to consider swapping to healthier alternatives
- getting people to change their eating and shopping habits is hard. However, people are more prepared to make healthy swaps for the sake of their children if they are “like-for-like” and if there are no cost or taste barriers
- it is difficult to change buying habits. Practically all changes in purchase are made within the same food and drink category. There can be about 30,000 lines in a typical supermarket, but people generally stick to buying about 300 lines in any given year²⁹.

Attitudes towards carbonated soft drinks, 2012³⁰



Supporting behavioural change by helping consumers choose products that contain less sugar is a key part of our current programme. Our commitments in this area are outlined below.

Digital “sugar swaps” promotion with hints and tips for reducing sugar intake

This will include promotion through the Change4Life and NHS Choices websites; e-newsletter to a million families on the Change4Life database; publication of a new downloadable “sugar swaps” leaflet to help parents reduce their children’s sugar intake; social media activity through the Change4Life Twitter account and more than a quarter of a million Change4Life Facebook friends. The sugar swaps provided in the leaflet are shown in Figure 4.

PHE has also produced a new “sugar swaps” filler radio advertisement planned to be aired from this summer.

A new Change4Life national consumer campaign on sugar reduction

PHE will build on the success of the January 2014 Change4Life Smart Swaps campaign and launch a major Change4Life sugar reduction campaign in January 2015 in the context of promoting a balanced diet. The campaign will use advertising, partnership marketing, digital engagement, community events, schools programmes and public relations to inspire further reduction in sugar consumption.

The programme will continue to use the most up-to-date behaviour change techniques and to encourage people to make sustained healthy changes to their behaviour through engaging information, support tools and special offers from commercial partners. PHE is also exploring a strand of communications targeting sugar reduction among teenagers, given that their consumption of sugar is so high.

Figure 4. Change4Life sugar swaps

sugar swaps

Here are some easy swaps to help your kids eat less sugar:

1. Drink swap

Swap sugary drinks to water, lower-fat milk, diet, sugar free, or no added sugar drinks. Remember even unsweetened fruit juice is sugary, so try not to let your kids drink more than 150ml a day.

2. Snack swap

Swap sugary snacks such as sweets, biscuits, chocolate, cakes and pastries for snacks without sugar such as fruit, unsalted nuts, rice cakes or toast.

3. Breakfast swap

Swap sugary cereal to plain cereal such as porridge, whole wheat biscuits or shredded whole grain.

4. Pudding swap

Swap sugary puds for low fat plain yoghurt or fruit.

5. Food label swap

When shopping, compare food labels and switch to the one that's marked no added sugar or sugar free. Some packaging has a colour coded nutrition label on the front of the pack. Go for more 'greens' and 'ambers' and fewer 'reds' in your shopping basket.

See how many Sugar Swaps your kids can do this week!

A refresh of the “5 a day” campaign

Currently two-thirds of adults do not achieve “5 a day”⁵. This is an area where the nation needs to do better and PHE will refresh the “5 a day” campaign to help increase fruit and vegetable consumption.

Fruit juices can be major providers of sugar for some people, particularly for children aged under 11 years⁵. Pure fruit juice only counts as a maximum of one of the “5 a day” even if more than one portion (a 150ml glass) is consumed. Smoothies are also high in sugar from fruit and are popular with consumers as they may count as more than one portion of your “5 a day”³¹.

Before refreshing “5 a day”, we therefore need to clarify advice around fruit juice and smoothies. We will also consider setting standards around the use of the “5 a day” logo on composite foods (such as ready meals). To do this we will work closely with our stakeholders.

In addition, when SACN’s report is finalised and is passed to PHE, we may propose changes to the Department of Health on nutrition advice on sugars and sugar-containing foods. Depending on any changes this may lead to updates of the various PHE owned/delivered healthy-eating tools including the “eatwell plate”, PHE’s catering guidance, Change4Life messaging, as well as changes to advice to other government departments, industry, non-governmental organisations and others on nutrition and healthy eating.

PHE will also continue to monitor the nutritional wellbeing and food consumption of the population through for example the National Diet and Nutrition Survey, which includes measures of sugar intakes. We will also continue to monitor the prevalence of excess weight in the population and tooth decay. In addition we will evaluate our own initiatives and provide guidance to others on evaluating their activities.

Exploring further approaches to reduce sugar intake

The Department of Health has asked PHE to provide recommendations to inform its future thinking on sugar in the diet, taking account of the recommendations from SACN as they are confirmed³².

To do this we will look at the evidence and emerging best practice on a wide range of potential approaches to allow us to provide comprehensive, evidence-based advice to Ministers in the spring.

We will look at the evidence for approaches that support people in changing their behaviour to choose healthier, lower sugar options. This will include evidence on social attitudes to sugar and diet, and the possibilities for establishing new social norms. We will also look at approaches that would aim to reduce sugar consumption by changing the choices available to people.

To inform our thinking we held two stakeholder meetings in June 2014 to discuss a range of possible options for sugar reduction. The discussions were informed by a paper commissioned by PHE from the UK Health Forum, which has been published to accompany this paper (see <http://bit.ly/UKHFSugar>). The paper scoped the range of possible actions that may reduce sugar consumption. In all, 23 options were identified, and in all 108 representatives from 74 organisations attended these events. The areas PHE will consider further are set out below.

Supporting people to make healthier, lower sugar choices

It is an individual's responsibility to improve their own and their family's diets, but they need to understand what changes to their diets might be needed and why, how to make the necessary changes and they must have the motivation to change.

The changes individuals and families might make are affected by a range of factors that influence their motivation and willingness to change. In turn these are affected by social norms, attitudes, understanding and access to healthy and unhealthy choices.

The dietary patterns of groups with lower incomes tend to be worse than those with higher incomes⁵. Cost is a major issue for this group of people, and healthy eating is perceived as being more expensive. Their shopping is heavily influenced by price promotions³³ and many are stuck in a familiar routine with their shopping and meal planning. To motivate change, small steps need to be added to their current routine and families do not want to feel any sense of loss as a result of the change.³³

There is a wide range of potential interventions to help inform, motivate and support us all in reducing our own and our families' sugar consumption. We will explore the evidence base and emerging practice across the following key areas:

- **further development of our social marketing.** PHE's current message style was outlined earlier in this paper. We will pilot and test more directional guidance on sugar reduction for acceptability and likely impact for possible inclusion in future campaigns
- **role for education and training for key professionals so they can effectively support healthier behaviour.** There are many health and other professionals whose roles provide an opportunity to share diet and health messages, including sugar reduction. Industry, media and communities also have a role to play. Appropriate training and support for all health professionals, not just dietitians and nutritionists, as well for educators and others across the food, fitness and leisure industries, will lead to improvements in this area. Training in some areas has been much improved in recent years. Course accreditation schemes and competency frameworks, such as those offered by the Association for Nutrition³⁴ offer ways of improving standards
- **local authority best practice in supporting people to maintain healthy diets.** We will work with local authorities to consider the wide range of good and innovative practice in supporting people to change their diets through information, motivational techniques and building skills and capability. We will encourage evaluation and disseminate evidence of success. In addition, because we appreciate that local authorities want to be reasonably certain that their investments pay dividends for their communities we will look for evidence to help support determination of long term cost-effectiveness
- **regulation of the advertising of sugary foods.** It has long been recognised that promotions of foods to children affect food choice and can drive unhealthy food choices³⁵. Ofcom^{iv} has already put in place controls that restrict the marketing of some products to children. Foods and drinks can only be advertised around children's TV programming if they meet a nutrient profile that takes into account the salt, fat, sugar and other nutrient content³⁶. Outside of broadcasting advertising of such food is controlled by the Committee of Advertising Practice code. PHE will consider the evidence and the case for considering tighter controls on advertising foods that are high in salt, fat, sugar on children's television and other media, particularly given the shift in children's screen time away from television³⁷. PHE will also take into account the findings of the review of the Advertising Standards Authority in this area

^{iv} Independent regulator and competition authority for the UK communications industries

- **in-store and on pack promotions.** We know from PHE's own work that in-store promotions affect sales of products and are an important part of securing change³⁸. This area has been highlighted by our stakeholders, and there are already examples of action, for example some supermarkets have removed confectionery from their checkouts. We consider this an important area for further exploration, especially in relation to the removal of incentives that encourage purchasing of high-sugar products, wider adoption of "sugar-free"/low sugar options at checkouts and a shift in the objective of upselling sales techniques away from encouraging customers to purchase extras or larger portion sizes and towards healthier product ranges
- **labelling.** The EU Food Information to Consumers Regulation 2011³⁹ has enabled the UK to recommend a new voluntary front of pack nutrition labelling scheme⁴⁰. This consistent labelling approach helps to inform consumers about the energy, total and saturated fat, sugars and salt content of prepacked products. A number of companies have pledged to introduce front of pack labelling under the Public Health Responsibility Deal (see Appendix 1). Wider uptake of this scheme would help consumers
- **portion size and social norms.** Trends in portion size over recent years are notable, particularly in venues such as cinemas where the "supersizing" of drinks is common. This helps influence behaviour change and shift social norms to make large portion sizes more acceptable. The very large cup sizes of some drinks are an iconic public health issue. PHE will look again at this issue and the positive changes that could be considered in terms of rebalancing the ranges of food and portions sizes offered toward healthy options
- **fiscal levers.** Several countries, including France⁴¹ for example, have introduced taxation on sugar-sweetened drinks. These have been predicted, through a number of economics models, to reduce consumption of such drinks⁴², but currently no evaluations on real impacts are available. We plan to make a more detailed assessment of emerging evidence around the effectiveness or otherwise of fiscal options to support sugar reduction and dietary health

Making the available choices healthier, and reducing their sugar content

Changing the food environment to make it easier for people to choose healthier products is an integral part of enabling behaviour change and helping people reduce their and their families' sugar intakes. Wider society including national government, the NHS, local government and industry play an important role in supporting the nation to improve its diet and reduce its sugar intake.

Over the last 20 years the food industry has acted to improve public health through a range of approaches (see Figure 3). The two big successes are the significant reductions of artificial trans fatty acids and salt reduction. Average intakes of trans fatty acids are now well within recommendations⁵ and salt intake has been reduced by 15% over the last 10 years⁴³. The latter has been mainly achieved by gradually reducing salt in a wide range of food groups, which has enabled changes to be made without people noticing differences in taste.

To support greater public health gains through a reduction in average sugar intakes across population groups, a range of approaches could be considered (detailed below). Some of these would lend themselves to international collaboration. The UK's successful salt reduction programme has been aided by collaborative working with other countries, where a collective voice enabled the international community to influence the food industry to make products that are lower in salt. A similar international approach to sugar reduction could be adopted.

It is clear from the calorie reduction pledges already made through the Public Health Responsibility Deal (Appendix 1) that sugar reduction is already being addressed through a range of approaches. Building on this early work, PHE believes that the evidence base and opportunities should be considered in a number of areas including:

- **reformulation across product groups** (for example, sugar-sweetened drinks). This would avoid companies being disadvantaged by changing their products where other companies do not. This might entail setting sugar targets for some products, mirroring the salt reduction work. Where reformulation is possible it could include the replacement of sugars with sweeteners and the gradual lowering of levels of both sugar and sweeteners. The latter would have the advantage of allowing tastes to adapt to a lower level of sweetness. It is acknowledged that some people have a preference not to consume foods containing sweeteners, despite the fact that sweeteners are only approved after their safety has been assessed by the European Food Safety Authority⁴⁴, or its predecessor the Scientific Committee on Food (SCF)⁴⁵
- **reduction of portion size** including confectionery and sugar-sweetened drinks, and ensuring that these are the “norm” and easily accessible rather than being a marginal offer. We do however recognise the tension for industry over the concern about perceived reduction in value for money for customers
- **food procurement and the public sector**. Implementation of the Government Buying Standards for Food and Catering Services (GBSF) and the enhanced tools currently being developed by the Department for Environment, Food and Rural Affairs have the potential to improve the health of all those consuming food procured by government, and to have a substantial impact on the wider food chain.

We will consider the opportunities and evidence base for building on the recent school food standards⁴⁶ and the ongoing work of the Hospital Food Plan⁴⁷ to bring similar standards for dietary health across the wider public sector

- **food sales and the public sector estate.** Concerns are often raised over the sale of high sugar and other unhealthy foods from public buildings, particularly when they are otherwise seen as promoting health, for example hospitals, leisure centres, parks and swimming pools
- **local government best practice in making healthy food more available.** Many local authorities are engaged in innovative work to make healthier food available to all. We will look at emerging best practice and conclusions on the most effective approaches. We will also encourage evaluation and the consideration of long-term cost savings for communities

Looking ahead

As part of our commitment to help improve the diet of the nation, tackle the obesity problem and improve health equity, with specific reference to reducing sugar intake, PHE will:

- immediately launch new digital messaging and radio advertising, followed by a full scale Change4Life social marketing campaign in January 2015 focused on sugar reduction
- launch a refresh of our “5 a day” campaign
- advise the Department of Health on any necessary revisions to dietary advice and nutrition messaging in light of SACN’s finalised advice on carbohydrates and health (expected in late 2014/early 2015). Further work to revise our key dietary messaging and improvement tools, such as the “eatwell plate”, and advice on catering may follow
- support the Department of Health in its work with the food and drink industry

To help deliver PHE’s commitment to the Department of Health to provide recommendations to inform government’s thinking on sugar in the diet³² in the spring of 2015, PHE will also:

- hold ongoing conversations with stakeholders around how we might reduce sugar intakes, including continuing to host listening events and discussion forums. This dialogue will help to ensure that when PHE give advice to the Department Health the narrative directly reflects the voices of a whole range of individuals and organisations that have an interest in sugar. We will hold at least two stakeholder events this year to enable this
- undertake evidence reviews and further analysis to allow us to consider in detail the possible initiatives on fiscal measures and the advertising and promotions environment in relation to healthy choices. We will engage our stakeholders in further discussion on this

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Appendix 1: Examples of actions currently in place that may reduce sugar intake

International	<ul style="list-style-type: none"> • trade agreements and quotas – EU production quotas and trade restrictions act to protect EU sugar and isoglucose producers by keeping EU prices high. Quotas are to be abolished in 2017, but very high import tariffs remain in place⁴⁸ • EU food safety assessments – for approval of sweeteners⁴⁹ • EU requirements for a standard format of labelling on food including sugar content⁵⁰
National	<ul style="list-style-type: none"> • Change4Life –social marketing programme that uses a range of media to support families to make a positive change to their diet and activity levels • “5 a day” messaging within Change4Life – seeks to limit fruit juice consumption to one portion (150ml glass) per day • whole school approach – promotes integration of messages across the whole ethos of the school, supported by a voluntary code of practice on drinks that does not allow sugar-sweetened drinks and promotes healthier menus. Nutrition and cooking are also being embedded into the National Curriculum • education – PHE supports the Food Competency Framework, which provides building blocks of knowledge for children and young people in order to live independent lives • PHE guidance on healthier and more sustainable catering – provides standards and targets that meet current recommendations for nutrient intake, including sugars⁵¹ • Government Buying Standards for Food and Catering Services – includes mandatory standards for government departments and their agencies around procuring food and catering services, ensuring foods are sustainable and served to higher nutritional standards • front of pack labelling – The EU Food Information to Consumers Regulation 2011 has enabled the UK to recommend a new voluntary front of pack nutrition labelling scheme. This consistent labelling approach helps to inform consumers about the energy, total and saturated fat, sugars and salt content of prepacked products

	<ul style="list-style-type: none"> • hospital food – the Department of Health has set up a Hospital Food Standards Panel, reporting to government ministers in September 2014, to advise on standards covering the nutritional content of patient, staff and visitor meals in a hospital setting • advertising restrictions – in April 2007 the media and communications regulator Ofcom introduced broadcasting restrictions to reduce the exposure of children to television advertising of foods high in fat, salt and sugar, applicable to terrestrial, cable and satellite commercial television companies licensed by Ofcom. This restriction also aimed to encourage the promotion of healthier alternatives • nutrient profiling – a nutrient profiling model was developed by the Food Standards Agency in 2004-2005 as a tool to help Ofcom differentiate between the different food types foods and therefore improve the balance of television advertising to children
Local	<ul style="list-style-type: none"> • Change4Life – all 152 local authorities have engaged with the national campaign and there are many local education and marketing initiatives to support individuals to make healthier choices • local initiatives – there is some exceptional practice being led by local government and the NHS including: <ul style="list-style-type: none"> ○ in January 2014 Leeds City Council ran its own local Smart Swaps campaign in parallel to a range of initiatives around the promotion of a healthy diet including the commissioning of cooking skills programmes, school breakfast clubs and a push to increase the uptake of school meals. It is noted in this area that 56% of community venues (such as schools, local authority services, the NHS, childminding, charities and small businesses) display Change4Life materials ○ Hull and East Yorkshire Hospitals NHS Trust is compliant with GBSF in all catering areas, including patient provision, hospital restaurants and trust retail outlets ○ the Royal Bolton Hospital has successfully achieved GBSF mandatory standards linked to significant progress around best practice nutritional criteria with colour coding/calorie labelling of menus and availability of healthier snacks profile
Food and drink industry	<ul style="list-style-type: none"> • the government’s Public Health Responsibility Deal – a voluntary “pledge” approach to improve the population’s diet by the food industry. The “calorie reduction pledge” includes: <ul style="list-style-type: none"> ○ Mars pledging to limit single chocolate portions to 250 calories or less ○ Britvic is to remove its full sugar Fuit Shoot from the market ○ Asda removing nine tonnes of sugar from condiments and

	<p>table sauces</p> <ul style="list-style-type: none"> ○ Coca Cola reducing the calories in Sprite by 30% and introducing a 250ml can of Coca Cola containing 105kcal in addition to introducing a new stevia sweetened Coca Cola, reducing calories by 30%. ○ Aramark and Beefeater are now offering meals of less than 500 calories ○ major retailers including Asda, Co-op, M&S, Sainsbury's, Tesco and Waitrose provide education, advice and information about the nutrition content of their products ○ a range of initiatives by caterers including the use of reduced calorie products and recipes, and healthy meal offers
<p>Consumer messaging and advice</p>	<ul style="list-style-type: none"> ● advice to individuals – Government dietary advice is depicted visually in the “eatwell plate” describing the types and proportions of the main food groups that constitute a healthy, balanced diet ● messages promoting consumption of fruit and vegetables are apparent through “5 a day” messaging and the use of the “5 a day” logo and portion indicator ● advice is provided to the public as part of the Change4Life social marketing campaign and website, NHS Choices Livewell pages, Start4Life and Information Service for Parents ● other organisations including retailers, manufacturers and non-governmental organisations, such as the British Dietetic Association and the British Nutrition Foundation, also provide information on diet and nutrition through their websites ● role of health professionals – many health professionals have roles that include provision of dietary advice or delivery of dietary/nutrition related interventions. Health professionals who provide individual advice may include GPs, nurses, registered dietitians and registered nutritionists. PHE is working with the Royal College of General Practitioners to develop an e-learning module to support continuous professional development ● the Association for Nutrition's Workforce Competence Model provides a framework that benchmarks competences and underpins standards for upskilling the wider workforce, including frontline staff, to ensure that workers are demonstrably competent and able to practise in accordance with defined standards of proficiency, conduct, ethics and training ● Delivering Better Oral Health – an evidence-based toolkit for dental teams promotes a reduction in sugar consumption in terms of frequency and quantity

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