



Public Health  
England

Protecting and improving the nation's health

# **Sugar Reduction: The evidence for action**

## **Annexe 6: Knowledge, education, training and tools**

# About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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## Annexe 6a. Change4Life

A key commitment PHE made in 'Sugar reduction: Responding to the challenge' was to encourage reduction in sugar intakes through the Change4Life (C4L) campaign. The 'smart swaps' digital marketing package aired in June 2014, in which the key swap was from sugary fizzy drinks to water, lower fat milks and sugar-free drinks. Activity included: publication of a new 'sugar swaps' leaflet to help families reduce their sugar intake (downloadable from the C4L website); an e-newsletter issued to over a million families registered with C4L; social media activity through Twitter and Facebook and airing of a new sugar swaps radio filler from Summer 2014. The sugar swaps were also promoted on the NHS Choices website. A decrease in the purchase of sugary fizzy drinks by more than 8% was seen during this campaign period when compared with January 2013.<sup>1</sup>

Building on the success from the January 2014 smart swaps campaign, the C4L 'sugar swaps' campaign ran from 5 to 31 January 2015. It aimed to help reduce the amount of sugar in children's diets by encouraging families to sign up for specific swaps targeting the highest contributors of sugar to children's diets including: sugary drinks, breakfast, after-school snacks, and puddings. Activity was in three phases:

**A pre-phase** (September to December 2014) included a partnership with Netmums and Reading University, which aimed to find out which specific sugar swaps were the most effective, most acceptable, enjoyable and sustained by families. Initial analysis suggests that on average the families were consuming 483g of sugar a day at the beginning of the challenge, reduced to 287g per day when making sugar swaps.

**Phase 1 – We're In** (3 to 4 January 2015), an industry-led press campaign highlighted the part industry is playing in helping people reduce sugar consumption.

**Phase 2 – Consumer launch** (January to February 2015). A multi-media campaign using two TV ads, focusing on sugary drinks and after school snacks, supported by radio, digital, outdoor advertising, public relations and media partnerships and a programme of emails and pack of resources for consumers who registered.

The campaign had 25 national partners including support from major retailers and manufacturers providing around a million pounds worth of money off vouchers, special offers in-store, point of sale and online/social content. Other partners provided signposting and other material and events. All 152 upper tier local authorities were engaged.

## Sugar swaps campaign results

- there were over 400,000 registrations to the campaign. For each person that signed up, another two people in the general population said they had also made a swap<sup>2</sup>
- tracking research showed record levels of spontaneous awareness of the C4L brand (48%, 79% prompted) and nearly universal association of C4L with healthy eating<sup>3</sup>
- sugar swaps worked particularly well for C2DE families who were most engaged and felt the campaign told them something new.<sup>4</sup> The majority of mothers agreed the campaign made it easier to encourage their families to eat less sugar

The most popular swap for parents to choose was the after-school swap. The snack swap was the area where most change was seen in purchasing data<sup>5</sup> and in a behavioural study<sup>a</sup> which looked at families' in-home consumption.

- the purchase behaviour of households who took part in 'sugar swaps' was compared to a matched control group. Families signing up to C4L purchased 6% less volume of sugary snacks and 6% less volume of sugary puddings while increasing lower sugar snack and pudding purchases
- this was supported by the behaviour study which showed changes in snacking habits. Families making the drinks swap tended to switch to water; and fruit was the most popular snack. The vast majority of families in the behaviour study claimed they were still making swaps six weeks later

There were also market-level changes at the time of the campaign. Purchases made during January 2014 compared to January 2015 showed a growth in sugar-free squash by 3.3% (with a decline in sugary squash by 3.5%) and the growth of plain breakfast cereals (14.8%) outpaced growth in sugary cereals.<sup>6</sup>

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<sup>a</sup> Mobile app diary of swap consumption amongst 580 people signed up to 'sugar swaps' to measure any changes in consumption habits versus a control group of 134 people in Wales. Participants were required to keep a diary of their snacks, drinks, breakfast or pudding consumption as well as providing photos of the food/drink in question.

## Annexe 6b. 5 A Day and eatwell

### '5 A Day'

The government recommends that everyone should eat at least five portions of a variety of fruit and vegetables per day. This is based on epidemiological evidence that consumption of more than 400g a day of fruit and vegetables (not including potatoes) is associated with reduced risk of certain chronic diseases.<sup>7</sup> Evidence shows that on average, we are not consuming enough fruit and vegetables. Over two thirds (70%) of adults aged 19 to 64 years and around 90% of young people aged 11 to 18 years do not consume five portions of fruit and vegetables per day.<sup>8</sup>

Work to increase fruit and vegetable consumption sits within PHE's wider work to improve diet and tackle obesity. This includes the '5 A Day' communications programme that aims to increase consumption and awareness of the health benefits through the Change4Life campaign, the NHS Choices website and other routes. The existing '5 A Day' logo and portion indicator scheme, launched in 2003 forms part of this programme helping people recognise the 5 A Day message and bringing consistency to the message across settings.

The report 'Sugar reduction: Responding to the challenge' set out plans to refresh the 5 a day campaign, including a reconsideration of advice on fruit juice and smoothies and to assess how the government's existing 5 A Day logo might apply to composite dishes (such as ready meals).<sup>b</sup>

Fruit juices can be a major source of sugar in the diets for some people, particularly children under 11 years.<sup>9</sup> Advice around consumption of fruit juice has been strengthened to limit consumption to one portion a day. That is, no more than 150ml glass of unsweetened 100% fruit juice per day in total (from fruit juice, fruit juice contained in smoothies, or both) and to consume this at mealtimes to reduce the risk of tooth decay. This advice has been publicised through Change4Life activity on sugar and via the NHS Choices website.

Licences for use of the existing government 5 A Day logo (on eligible products and promotional activity) are now free of charge. Licensing arrangements have been brought 'in-house' by PHE and will be reviewed to make the process less onerous. The outcome of this work, together with the development of the refreshed government 5 A

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<sup>b</sup> Use of the government's current 5 A Day logo and portion indicator scheme is limited to plain fruit and vegetables (eg fresh, chilled, frozen, juiced or dried) and fruit/vegetable products without any added fat, sugar or salt. Composite foods are defined as a food or drink comprised of two or more ingredients, at least one of which is not a fruit and/or vegetable (such as cauliflower cheese or coleslaw).

Day logo under way, will encourage and facilitate wider use. Work is in train to launch the refreshed 5 A Day logo in early 2016.

In autumn 2014, PHE established an external reference group to inform our consideration on the possible extension of the government 5 A Day logo to include composite foods.<sup>10</sup> PHE have published their advice.<sup>11</sup> We are reviewing the group's advice to us and will then make a decision on what opportunities there may be to extend the government 5 A Day logo to include composite foods. This will inform discussions with UK health departments on the way forward.

### 'eatwell'

The 'eatwell plate' visually depicts government advice on healthy eating. 'Sugar reduction: Responding to the challenge' set out plans to revise key dietary messaging and improvement tools, such as the eatwell plate, in light of SACN's finalised advice on carbohydrates and health.

In autumn 2014, PHE established an external reference group<sup>12</sup> to consider the impact that the draft SACN recommendations may have on the national food guide, the eatwell plate. This reference group has been providing advice to PHE on the possible options for updating the eatwell plate segment sizes, as well as reviewing the visual aspects of the model. PHE has been using a number of modelling techniques to support this work, including modelling based on movement from current dietary intakes to the new SACN recommendations; modelling using linear programming approaches; and data re-modelling of existing example menu plans.

PHE is conducting two phases of consumer research to support this review and improve communication of healthy eating messages. The first phase has explored public understanding of the current plate model alongside initial suggestions for changes in execution, content and supporting messages. The second will test an updated plate visual.

The results of the review will be used to inform advice to the Department of Health on possible changes to official dietary recommendations. Subject to the outcomes of the review, the revised eatwell plate is likely to be launched in early 2016.

## Annexe 6c. Training in diet and health for the wider workforce

There are many occupations and individuals who have the potential to influence the diet and health of those they come into contact with. Evidence suggests that many of these, including child minders, fitness instructors, caterers and those working in care homes, currently receive little, if any, training in these key topic areas. A large number of courses offering training in diet and health exist, but the availability, cost and quality of such courses is hugely variable, with very few of them being accredited by reputable, professional bodies. The training of non-nutritionists is therefore an area that requires consideration and development.

The main aims of this strand of work were to:

- identify the different occupations or individuals who might benefit from training, and the organisations that may help to deliver this
- work with the Association for Nutrition (AfN) to devise a competence framework for non-professionals working in the fitness, leisure and catering sectors
- identify local authority case studies where training had been given to the wider workforce
- engage in discussion on general teacher training around diet and health, and identify where such information is passed on to pupils outside of structured, standard learning

### Mapping of key groups for training and educating the wider workforce.

PHE carried out a mapping exercise to identify the occupations that would benefit from training in the basics of diet and nutrition, the groups or individuals they could influence/educate, and the organisations and initiatives involved in providing training. Occupations that could benefit from additional training in this area include: pre and post natal care (ie midwives; health visitors); other healthcare professionals (GPs; nurses; dentists; podiatrists); childcare; schools; care facilities; catering; and fitness and leisure industries. Organisations involved in delivering this training include initial teacher training; online courses; the AfN, other non-governmental organisations (NGOs) and local authorities. This exercise highlighted the need for a competence framework in diet, health and nutrition for non-professionals working in the fitness, leisure and catering sectors.



## Competence frameworks in nutrition for fitness and leisure, and catering

This section presents the report from the Association for Nutrition (AfN) on the development of competence frameworks in nutrition for fitness and leisure and for catering.

### Introduction

The AfN is a registered charity. Its purpose is to protect and benefit the public by defining and advancing standards of evidence-based practice across the field of nutrition and at all levels within the workforce. AfN holds the UK Voluntary Register of Nutritionists (UKVRN). In 2012 AfN published its innovative 'Workforce competence model in nutrition', developed through the Department of Health funded project 'Improving capacity, confidence and competence in nutrition'. Aimed at the health and social care workforce, the competence framework set a baseline of nutrition knowledge for both health professionals and the wider health and social care workforce.

Working with PHE, AfN has now developed two further competence frameworks to improve the nutrition knowledge and skill of those who work or volunteer in the fitness, leisure and catering sectors who also have a responsibility or opportunity to guide food choice; the 'Competence framework in nutrition for fitness and leisure;' and the 'Competence framework for catering'. These are available on the AfN website.<sup>13</sup>

### Stakeholder engagement

The frameworks were developed through qualitative and quantitative research engagement with stakeholders and those currently working and volunteering within the relevant sectors at Level 1 (eg volunteers that work with sports clubs, waiting staff) to Level 4 (eg development chefs, personal trainers dealing with specific medical conditions). This included an analysis of nutrition knowledge, qualifications, training, job roles and person specifications, and an assessment of public trust and confidence in the nutrition knowledge and training of those within the relevant sectors who guide food choice. An analysis of National Occupational Standards (NOS) and Awarding Organisation's (AO) qualifications was undertaken to determine where nutrition featured within the vocational education and training that supports the job roles within each sector, illustrating the limited extent to which nutrition is referenced. In addition, AfN research<sup>c</sup> indicated the majority of those who work or volunteer at Levels 1 to 4 provide nutrition information directly to the public but do not have the nutrition knowledge and training to do so safely or effectively. For example, 67% of those surveyed in catering

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<sup>c</sup> Online survey at levels 1 to 4: 227 valid responses from catering; 255 sport, fitness and leisure. 157 structured interviews.

and 74% in fitness said they routinely provide nutrition information to consumers or clients/participants, but only 30% of those within catering knew the correct size of a glass of fruit juice in relation to the 5 A Day advice; and only 7% within fitness and leisure could correctly identify a snack with the lowest sugar content from a simple range of foods.

### Competence frameworks in nutrition for fitness and leisure, and for catering

The competence frameworks describe the expected level of competence in nutrition aligned to the qualifications and credit framework (QCF)<sup>d</sup> Levels 1 to 4 and include a code of practice. The framework also describes professional boundaries for safe practice at each Level. Each framework includes three competencies, supported by a number of individual topics and knowledge statements which advance in depth and scope at each Level. See the summary outlined in table 1.

**Table 1: Summary of topics within each competence, supported by knowledge statements**

<b>Catering</b>		<b>Leisure and fitness</b>	
<i>Competence</i>	<i>Topics covered by Knowledge Statements at Levels 1 to 4</i>	<i>Competence</i>	<i>Topics covered by Knowledge Statements at Levels 1 to 4</i>
1. Fundamentals of Human Nutrition	Healthy eating guidelines; food groups and sources of nutrients; portion size; energy requirements and energy balance; nutrient intakes; food labels; eating patterns; food preparation; hydration and fluid/beverage intake; alcohol; nutrition communication and safe practice.	1. Fundamentals of Human Nutrition	Healthy eating guidelines; food groups and sources of nutrients; portion size; food labels; energy requirements and energy balance; eating patterns; food preparation; hydration and fluid/beverage intake; alcohol; nutrition communication and safe practice.
2. Improving health and wellbeing	Under and over nutrition, diet and health risks; health effects of specific ingredients; health based food choice; menu planning and recipe development.	2. Improving health and wellbeing	Under and over nutrition, diet and health risks; nutrition, body composition and health; limits of safe practice when recommending dietary supplements (and performance aids); general strategies for promoting behavior change in relation to nutrition.

<sup>d</sup> Qualification and Credit Framework (QCF) is the national qualification framework used in England, Wales & NI. QCF will be replaced shortly by Framework of Regulated Qualifications (FRQ), however, the levels referred to here will remain the same under the new FRQ. These levels are used to describe the target workforce's skill, vocational education and training.

3. Allergy and food restrictions	Food allergy, food allergy ingredients and food labels; food intolerances; religious, cultural and ethical food choice.	3. Nutrition monitoring and data collection techniques	Body composition measurement and interpretation; technology for dietary information collection and monitoring; dietary records; data collection.
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### Use of terminology

Standard terminology to describe the competence required at each level has been developed to align to QCF descriptors. The use of the terms ‘awareness’, ‘knowledge’ and ‘application’ within the competence frameworks demonstrates the required progression between Levels and map to existing qualifications used by employers and training providers. A glossary of nutrition terms used in the frameworks is also provided.

### Achievement of competence

Achievement of competence is cumulative, ie it is assumed those who achieve Level 4 have also achieved Levels 1 to 3. Competence will initially be assessed by extending the reach of AfN’s established certification scheme to quality assure workforce education and training. Research indicated a need for individual assessment of competence, to ensure all those who work or volunteer in fitness, leisure and catering are competent in nutrition at the relevant level (as described by the competence framework) to ensure safe and effective practice in guiding food choice. Should individual competence assessment become a mandatory requirement for the workforce, its effect, in terms of improving nutrition knowledge and skill, will be greater than a scheme relying on voluntary participation.

### Conclusion

If dietary recommendations, including those made within SACN’s ‘Carbohydrates and health’ report, are to be achieved at scale, all those who work or volunteer in fitness, leisure and catering who have a responsibility to guide food choice should be demonstrably competent in nutrition at the relevant level. The competence frameworks that have now been developed specifically for these sectors will help to ensure this can be achieved by improving skill and capacity, reducing the incidence of individuals potentially providing unreliable and non-evidence-based nutrition information, and supporting the achievement of public health improvement targets and the reduction of nutrition-related health inequalities.

## Local authority case studies of training the wider workforce

It is apparent that the practice of delivering training in diet and health to key non-health professionals varies across local authorities reflecting local priorities, and not all will have comprehensive learning strategies in place. These individuals working at a local level have suggested that PHE should provide signposts to suitable accredited training courses in order to maintain the quality of training and demonstrate its importance. AfN assesses courses in nutrition including short courses suitable for use within LAs and provides certification for those that meet its standards.

A number of local authorities have themselves developed courses. Two examples are given below.

### West Sussex County Council

Using the 'make every contact count' model, West Sussex County Council (WSCC) developed a competency framework from three existing frameworks,<sup>14,15,16</sup> and, using this, built a training course to improve knowledge around healthy eating messages within the wider work force. Following a tender process Nutrinsight was commissioned to deliver a one day training course around key healthy lifestyle messages including a detailed assessment of the eatwell plate, as well as recognising signs for intervention and signposting to relevant services where necessary.

This course has been repeated successfully, and over two years (2012 to 2014) more than 700 people have been trained including health visitors, youth offending teams, midday meal providers, early years providers, teachers and head teachers and social workers.

### Eastern and coastal Kent

Training in diet and nutrition in eastern and coastal Kent<sup>e</sup> is currently supported by the Food champions programme<sup>17</sup> provided by Kent Community Trust. Since 2009, this programme has supported workers and volunteers in the local community in advocating the benefits of eating healthy, tasty and affordable food. The programme offers basic training in nutrition, and the skills needed to encourage local residents to improve their eating habits and cooking skills, and after the basic course supports the Food Champions through mentoring.

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<sup>e</sup> Delivery of training and education of the wider workforce in the county of Kent is currently split by the historic Primary Care Trust borders into two areas Eastern and Coastal Kent and West Kent. The information included here relates to Eastern and Coastal Kent only.

## Online training courses

It is worth noting that there are a number of online nutrition training courses available which may be more accessible for individuals than attending a course.

The British Nutrition Foundation (BNF)<sup>18</sup> has developed two online training courses for the Royal College of Midwives<sup>19</sup> which are freely available to all members. One course covers healthy eating in pregnancy; the other is related to obesity in pregnancy. The BNF has also developed its own online training courses that are available for a small charge. These include a basic healthy eating course; three courses on fibre developed for different audiences (pharmacists, midwives and practice nurses); and a course on allergy prevention and diet in early life specifically for health visitors and midwives. Other courses are being developed including 'Catering for health online', a course specifically designed for food service providers; and a more advanced healthy eating module. The BNF is currently considering the possibility of accrediting these courses through the AfN.

In 2014 Brakes, a supplier of food to the catering sector, developed an online training course,<sup>20</sup> in partnership with Nestle, to provide easily accessible, quality training in nutrition for caterers working in the care home sector. The course is free to access for all Brakes customers and their staff. It comprises four modules – the first two focus on the basics of a balanced diet and the second two cover specific diets that might be required by care home residents, and menu planning. The course is accredited by the AfN.

## Teacher training

As part of wider efforts to improve public health outcomes for school age children, PHE is committed to helping build the capacity and capability of teachers as part of the wider public health workforce. In March 2015 PHE jointly hosted a seminar with the Personal, Social, Health and Economic Education (PSHE) association entitled: "Healthy and effective learners – the contribution of initial teacher education (ITE)". It attracted a wide range of interest from professionals working with student teachers in both higher education institutions and school-based ITE as well as those in public health.

The seminar highlighted the challenge of adequately equipping teachers with the skills to promote child health and wellbeing given the competing demands within the ITE curriculum. Securing adequate time to cover issues such as healthy eating alongside other health issues (such as drugs, alcohol, smoking and mental health) which are normally addressed in the non-statutory PSHE curriculum is highly challenging.

PHE and the PSHE Association are summarising the recommendations for practice arising from the seminar. These will be used to stimulate conversations with national partners to promote system change.

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