

## A Report on the Food Education Learning Landscape





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## FOREWORD FROM JAMIE OLIVER

Childhood obesity has tripled over the past 30 years. Food is no longer feeding us, it's destroying us, and it's damaging our children's health.

The biggest scandal is that childhood obesity is avoidable. We all have the power to improve the food our children eat and it starts with food education.

I've been interested in school food and our kids' food education from day one. It's been a personal journey for me – from seeing first-hand the shameful state of school dinners back in 2005 to developing my own food education programme, The Kitchen Garden Project, and campaigning for better school food for a decade.

This major report on food education, carried out by my Foundation and helped by so many other brilliant organisations, has studied all the data. We've spoken to everyone, from headteachers to food teachers, parents, school governors, and kids themselves.

We've found that there's a massive difference between the schools that are doing a great job at delivering food education and those that are struggling. We are alarmed at the concerns raised about the food available, particularly in secondary

schools. But at the same time, we are really motivated by the teachers, pupils and parents asking for a healthier school environment.

We have a duty to make sure our kids understand food. Where it comes from. Why it's important. How to cook it, and why it's exciting. I want them to grow up really loving food, so they can eat well, and be healthy and happy.

Every passing year is a wasted opportunity to tackle this problem head-on. Now that we have the hard evidence to back up the changes we need to make – let's do it! It's time to give our kids the support they need for a healthy future.

This report lays out the really important, practical recommendations that I hope government, school leaders and others will put into action.



Jamie Oliver

## EXECUTIVE SUMMARY

*“Every kid in every school no matter their background, deserves to learn the basics about food – where it comes from, how to cook it and how it affects their bodies. These life skills are as important as reading and writing, but they’ve been lost over the past few generations. We need to bring them back and bring up our kids to be street wise about food.”*

— Jamie Oliver

## Executive Summary

### Why have we conducted a Food Education Learning Landscape review?

*Cooking and Nutrition* was introduced into the English national curriculum for all 5-14 year olds in 2014, but no study or evaluation has taken place. The Jamie Oliver Food Foundation decided to undertake a review to find out how much food education is going on in schools, and how effective it is in helping our children develop key food skills and a healthy attitude towards food. We wanted to comment on current practice and unearth the pivotal barriers to effective food education. We also wanted to recommend actions to ensure our children can eat better and improve their health and wellbeing.

To help us in our review, we worked in partnership with the British Nutrition Foundation, the Food Teachers Centre and the University of Sheffield, as well as a large number of food education experts who contributed time, expertise and resource in gathering and analysing the data. We focused on England, though used wider UK and international data where relevant.

### What specifically did we want to understand?

- What are pupils learning in their food education?
- How are pupils learning? (i.e. who is teaching; what kind of learning activities are going on; what resources are available; where are pupils learning; how does this vary across school key stages?)
- How does the wider school food culture support or hinder pupils healthy eating behaviours?
- What do pupils, parents, senior leaders and food teachers think can raise the quality and effectiveness of food education and food culture in schools, to enable pupils to learn about, and put into action, healthy eating behaviour?

### How did we conduct our research?

We held a number of cross sector workshops themed around 'Curriculum', 'Whole School Approach' and 'Behaviour Change' to determine what the focus of our research work should be.

We then commissioned:

- A two-part study with senior leaders in primary and secondary schools (Schoolzone).
- A survey of food teachers in primary and secondary schools (British Nutrition Foundation and Food Teachers Centre).
- Focus groups with children and young people (University of Sheffield).
- A survey of parents (Populus).
- Individual school visits and interviews, including with school governors and school caterers (Jamie Oliver Food Foundation).

### What did we find out?

We found a wide difference between those schools that were doing a great job at delivering strong school food education, and those schools that were struggling. We were alarmed at the particular concerns raised about the school food environment at secondary schools. Finally, the pupil and parent voice was clear that they wanted a healthier school environment.

We grouped our findings into three themes:

#### Curriculum (formal food education)

**The new national curriculum guidelines are broadly being implemented, however, there is great variation between schools in the quantity (duration and frequency), content and quality of food education.**

- The development of pupils' food **knowledge and skills** is incomplete: delivery of all aspects of the food curriculum is patchy, and many children are unable to practice cooking skills.
- There is limited evidence of pupils being taught how to **apply** the principles of a healthy diet in their food choices, e.g. learning about decision-making and dealing with social influences.
- Food teachers report that they are heavily constrained in their delivery of food education by a lack of time, budget and facilities.
- Many children want more complexity and to experience more hands-on learning.
- Food teachers and other teachers receive little professional development in food education.



### Culture (how a whole school approach supports food education)

**Although some schools adopt a whole school approach in which food education is linked to a positive food culture and environment, this is still not the norm, especially at secondary level.**

- Most food provision at *secondary level* does not support healthy eating behaviours. There is frequent provision of (often cheaper) unhealthy foods throughout the school day, and children noted a scarcity of healthy options.
- There is often a lack of monitoring and enforcement of School Food Standards<sup>1</sup> at secondary level.
- Pupils report that they can find their food dining environments noisy and unappealing, especially at secondary level. Long queues limit free time and they are sometimes unable to obtain the food they want to eat.
- Pupils report a lack of positive messaging and discourse about healthy eating and food choices across their wider school environments.
- Unhealthy foods, like sweets, chocolate and cakes, are commonly used as part of school reward, celebration and fundraising activities. This contradicts pupils' food education and parental opinion.

### Choice (the food behaviours that children are adopting)

**Pupils in many schools, particularly secondary schools, find it difficult to make healthy choices due to poor school food environments.**

- Secondary pupils frequently reported choosing to purchase and eat unhealthy foods, which are offered through school catering facilities at multiple points during the school day.
- Pupils described strong social and cultural influences on what, where and how they wanted to eat. For example, secondary pupils often favoured take away food.
- Secondary pupils also reported strong economic influences, particularly regarding the favourable pricing of less healthy food and drink items, over more healthy items.
- Pupils described how frequent fundraising activities in primary and secondary school encouraged them to purchase and eat unhealthy foods.

### So, what should be done?

The interaction of insufficient food education and the poor school food environment often leads pupils to make choices that they acknowledge are unhealthy, but often feel that they are compelled to pursue. This is especially so at secondary level.

We were keen to ensure that all recommendations address pupils' *'capability'* (their development of knowledge and skills), *'opportunity'* (their physical and social food environment) and *'motivation'* (their values and aspirations) so that they will be better able to *apply* their food knowledge, including making healthy choices.



## Executive Summary

We have grouped our recommendations into four areas:

### Ensure schools are healthy zones

**Schools should be ‘healthy zones’ where pupil health and wellbeing is consistently and actively promoted through the policies and actions of the whole school community.**

- Government should make School Food Standards mandatory in all schools and cover all food consumed when at school.
- The Department for Education (DfE) and the National Governors Association should jointly reissue guidance for governors on their responsibilities for school food, and consider placing a ‘health and wellbeing’ statutory duty of care onto governors.
- An expert group should come together to work up specific guidance for secondary schools in developing a positive school food ethos and culture.

### Support the school workforce

**We must support the knowledge and skills development of the whole school workforce to enable quality food education delivery, supported by a positive whole school approach to food.**

- DfE should commission the development of a suite of professional development courses to support the delivery of effective food teaching in schools.
- DfE should commission a set of headteacher *‘health and wellbeing core competencies’* linked to wider standards for school leadership.
- A specific Initial Teacher Training *‘health and wellbeing module’* should be included as part of wider initial teacher training routes.

### Improve resources

**Schools should be provided with the resources to facilitate delivery of better, more consistent food education.**

- DfE and the Department for Environment, Food and Rural Affairs (Defra) should establish an educational/industry working group to make recommendations as to the appropriate mix of academic and vocational food qualifications.
- Government should consider investing in a cross departmental/cross sector food initiative aimed at promotion of food education in schools.
- A taskforce of food teachers, designers and chefs should design and develop an affordable ‘cooking cube’ for those 75% of primary schools that don’t have dedicated resources<sup>2</sup>.
- The potential of a social investment loan scheme for schools should be investigated.
- Government should ensure the Healthy Pupils Capital Fund is both targeted to those schools that need the most help and is dependent on schools achieving the Healthy Rating Scheme.

### Report and evaluate

**Reporting and evaluation of food education, food culture and food provision should be mandatory.**

- The Government’s proposed Healthy Rating Scheme for schools<sup>3</sup> should be a mandatory requirement for all schools.
- The five measures identified in the Government’s School Food Plan must be carried out.<sup>4</sup>
- Ofsted reports should always report back on ways the school is addressing pupil’s physical, nutritional and emotional health and wellbeing.
- Ofsted should ensure that inspectors have the appropriate skills and competence in health and wellbeing to be able to assess appropriately.

# 1. INTRODUCTION

*“With rising obesity rates, the increase in fast foods and the lack of food education, it has never been so important for us all to understand how to eat healthily. This is even more important in schools. Children must be supported, nurtured, encouraged and taught to reach their full potential. Children must learn how to eat healthily and how to cook.”*

— Tim Baker, headteacher of Charlton Manor Primary School

Three years on from the introduction of *Cooking and Nutrition* into the national curriculum<sup>5</sup> (England), there has been no study of its impact. We have no national record of the amount or type of cooking that is going on, how well it is being done, and the skills being learnt. We have no understanding of the confidence and competence of our teachers in delivering effective food education.

But, equally importantly, we don't know how their acquired skills and knowledge are being turned into action. Will children **want** to cook well for themselves (and their families) in the future, and are the cooking knowledge and skills being taught leading to behaviour change; are they making healthier choices and eating well?

We cannot state the difference food education makes in tackling the multiple diet-related challenges our children face. Although the food education learning landscape is markedly more progressive than ever before, there needs to be a comprehensive evaluation into the gaps and barriers that still exist.

This is why the Jamie Oliver Food Foundation decided to undertake a review to find out how much food education is going on in schools, and how effective it is in helping our children develop key food skills and a healthy attitude towards food. We wanted to comment on current practice, unearth the pivotal barriers to effective food education, and recommend specific actions that can be taken so that our children can eat better and improve their health and wellbeing.

Over the last year, the Foundation has worked with everyone who has a part to play. Working in partnership with the British Nutrition Foundation, the Food Teachers Centre (and with expert academic contribution from The University of Sheffield), we have talked to education and health experts, teaching groups, non-governmental organizations (NGOs), headteachers and food teachers, governors and caterers, parents and pupils to get a clear understanding of the current food education learning landscape.

We have undertaken robust research using surveys, interviews and focus groups, and read widely around the existing reports and academic literature, in order to uncover the exact nature of existing constraints and propose responses and solutions to these hurdles. Through this work, we aim to identify the support and action needed to enable our schools to deliver better food education and address the multiple food-related challenges our children face.

## 1.1 WHY IS FOOD EDUCATION IMPORTANT?

*“Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.”<sup>8</sup>*

— National curriculum in England

Children's food education is important. Not only does it provide children with the skills, knowledge and ability to lead healthy and happy lives, but it gives children the opportunity to unlock their imagination, understand the journey and achievement of starting and finishing a recipe, and to learn how to be self-sufficient, responsible, and informed. It also teaches important life skills, like social awareness and manners, and can contribute many levels to their development in terms of health and nutrition, environmental awareness, and even affect potential career choices. We have lost this fundamental life skill and we are now in a climate where we, more than ever, need to know to cook, feed ourselves well, and lead long and healthy lives. Food education is not only effective in isolation.

As part of a whole school approach, it is complementary in leading to healthier outcomes, higher attainment and improved behaviour and concentration in the classroom. Public Health England (PHE)<sup>9</sup> have reported that a whole school approach to healthy school meals, universally implemented for all pupils, has shown improvements in academic attainment at Key Stages 1 and 2, especially for pupils with lower prior attainment – the link between a healthy, balanced diet and academic outcomes has been proven by numerous academics and policy-makers.\*

\* See bibliography on page 87, and also “the library” webpage at [www.schoolfoodplan.com/library](http://www.schoolfoodplan.com/library)

## 2. CONTEXT

*“A survey undertaken in 2016 showed that only 16% of millennials say they learnt to cook at school or college.”<sup>26</sup>*

## 2.1 What is the state of children's health?

This is the first generation of children likely to die before their parents due to diet-related disease.<sup>10</sup> No child chooses to be overweight or obese and yet by the time our children finish primary school one in three are overweight or obese, with one in five children obese.<sup>11</sup>

At the same time, children's oral health is fast declining. Rates of tooth decay are rising once again and it is now the most common reason for hospital admission for children aged 5 to 9 years old. As well as untold misery for these children, they also miss an average of three days off school.<sup>12</sup>

Eating disorders are also on the rise in young men and women, experts cite increased social pressure on body image<sup>13</sup>, not to mention fads and concerns of different diets.

Because children spend 190 days per year at school, schools have a profound influence on the health and habits of young people; research suggests the values, ethos, and culture promoted in schools are critical in this regard.<sup>14,15</sup> They are an important place to support embedding knowledge and practice of healthy eating and healthy food choices.

## 2.2 What is the current school food policy landscape?

In recent years, much has been made by Government of the role schools can play in tackling child obesity and shaping healthy habits.<sup>16</sup> The publication of the School Food Plan and the introduction of the PE and Sport premium<sup>17</sup> in 2013 were important school precursors to the further policy announcements made in the 2016 Child Obesity Plan.<sup>18</sup>

Several school-focused initiatives have been implemented in recent years. Practical cooking and nutrition lessons are now a mandatory part of the national curriculum (England).<sup>19</sup> Revised School Food Standards<sup>20</sup> are in place, designed to make it easier for school cooks and caterers to serve tasty and healthy meals. Following a Coalition announcement in September 2013, universal infant free school meals are now served daily to over 2.9m children.<sup>21</sup>

The current English government's Child Obesity Plan states it wants to build on these important initiatives.<sup>22</sup> The proposed Healthy Rating Scheme<sup>23</sup> for schools is planned to encourage them to recognise and prioritise their roles in supporting children to develop a healthy lifestyle. School Food Standards are due a refresh to take account of new, stricter, dietary guidelines aimed at reducing sugar consumption.

Ofsted are tasked with taking the Healthy Rating Scheme into account as an important source of evidence about the steps taken by the school to promote healthy eating and physical activity. In addition, Ofsted have also been tasked with undertaking a thematic review on obesity, healthy eating and physical activity in schools, making future recommendations on what more schools can do in this area.

In February 2017, indications of how the £415m Soft Drinks Industry Levy would be spent was announced, (giving schools capital funding to improve healthy eating and active lifestyles)<sup>24</sup> though recent education spending decisions made in July 2017 seem to have disappointingly removed most of this healthy pupils capital fund.

However, a year on from the Child Obesity Plan's publication, no real action in schools has taken place, with the only political discussion on school food being the proposed Conservative manifesto pledge to scrap universal infant free school meals and replace them with universal free breakfasts.<sup>25</sup> Many NGOs and campaign groups have been critical of the lack of progress made by DfE.



### 2.3 Brief history of food education in schools in England

Food teaching was introduced into schools in the latter half of the nineteenth century in private and secondary schools. Domestic economy (cookery, needlework and laundry) was first introduced into the state school system (in pauper schools) in the 1840's to help improve basic living standards. It became compulsory for all girls in 1878, shortly following the 1870 Education Act.

Since that time, food education and cooking has had many iterations in schools, from Domestic Science, Household Science, Housecraft, Home Economics, through to the more recent Food Technology. It continued to be a subject mainly for school girls, and focused on the practical 'instructional' aspects of cooking.

There were no major developments to food teaching until the national curriculum was introduced in 1990, where the aim was to prepare children for the 'opportunities, responsibilities and experiences of adult life'. Food education was bound into the new Technology (later revised to D&T) subject, and moved away from just practical cooking into teaching about food products and commercial food technology.

The last two decades have seen an unstable journey for food education on the curriculum. There has often been a lack of understanding and uncertainty of the exact content of food technology, and no common agreement of the syllabus or of how to teach it. There have also been multiple revisions to the curriculum requirements over the years which have provided constant challenges for teachers attempting to understand what was required in teaching food through D&T.

The Labour government set out plans to make food a compulsory subject on the curriculum in 2007, and also announced funding for food teaching with the Licence to Cook programme, championed by then DfE Secretary of State Ed Balls, giving all secondary school pupils the opportunity to learn how to cook. However, curriculum changes were stalled by the Coalition government until 2014, when Cooking and Nutrition was introduced. A new GCSE in *Cooking and Nutrition* was introduced in September 2016. Food A Level was withdrawn from the national curriculum from September 2017.

Tellingly, a survey undertaken in 2016 showed that only 16% of millennials say they learnt to cook at school or college, whereas 48% relied on their parents to learn how to cook – an age that will be dying out if the 16-34 year olds aren't better equipped with cooking skills for their future and their children's future.<sup>26</sup>

## 2.4 How is the food curriculum currently taught in the UK?

Each of the UK's four nations has its own school curriculum. While there are differences, key learning around food is generally consistent.

|   |  |
|---|--|
| <p><b>England: Published in September 2014</b></p> <p>In relation to food and nutrition education, <i>Cooking and Nutrition</i>, a discrete strand within Design and Technology for Key Stages 1 to 3, was introduced. All maintained schools in England are required to follow the curriculum, although they do have the opportunity to enhance with additional subject content.</p> | <p><b>Wales: Published in 2008</b></p> <p>The curriculum starts at Key Stage 2 – (5–7 years is covered by the early years phase). The curriculum is statutory. Food education is taught via Design and Technology. The Welsh Government is undertaking a review of the curriculum<sup>27</sup>, although this will not be available in schools until September 2018 (and used throughout Wales by September 2021).</p> |
| <p><b>Northern Ireland: Updated in 2014</b></p> <p>Primary phase has no specific 'food' subject, but does provide contexts in which work with food can be undertaken. At Key Stage 3, Home Economics is statutory. The curriculum is statutory.</p>   | <p><b>Scotland: Published in 2010</b></p> <p>Food education is from 3 to 16 years. Many subjects support food education, which are cross-referenced, e.g. Health and Wellbeing, Technologies, Science. The curriculum is statutory.</p>  |

### The current English Cooking and Nutrition curriculum<sup>8</sup>

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should be taught to:

Key stage 1

- Use the basic principles of a healthy and varied diet to prepare dishes
- Understand where food comes from

Key stage 2

- Understand and apply the principles of a healthy and varied diet
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

Key stage 3

- Understand and apply the principles of nutrition and health
- Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet
- Become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes]
- Understand the source, seasonality and characteristics of a broad range of ingredients

Food education is also taught through the subjects of Science and Personal, Social, Health and Economic (PSHE) education. In Science, the focus is on understanding aspects of human nutrition and digestion, whereas PSHE focuses on health within a wider context of well being and making food choices.

Other curriculum subjects can also contribute through a cross-curricular approach, such as Geography (where food grows), English (following and writing recipes), Maths (weighing and measuring), and History (how food choices and consumption have changed over time). Physical education plays an important role on physical competency, and at Key Stage 3 healthy lifestyles are introduced.

## 2.5 Who is being taught food education at school and college?

We wanted to present an accurate picture of the numbers of young people taking formal food education qualifications, but have found the exercise challenging, despite engagement with professional food education bodies. Both the British Nutrition Foundation and the Food Teachers Centre fed back that no one place brings together the full mix of academic and vocational data sets around food education. And it doesn't seem that vocational data for 14-19 year olds is separated out. Additionally, food qualifications are split across food production (Agriculture and/or Horticulture) and the Catering and Hospitality industries which means data sets that are collected are further split.

Nonetheless, the following table attempts to summarise the data sets we have received from multiple sources. We have shown whether the study is at school or college (sometimes it is a mixture of both), and whether it is an academic or vocational qualification. It seems that no data is collected on those young people who might be studying food in some form but are not taking a formal qualification.

For academic qualifications there has been a marked decline. In 2009/10, 93,795 food related GCSEs and 4,262 A or AS levels were awarded, this represents a 38% decrease in GCSE and 43% decrease in A level from 2016 figures.

Figures, where available, are for 2016.

| Year Groups                                      | Food related academic qualifications  | Food related vocational qualifications                        |
|--|---|---|
| 14-16 year olds                                  | <b>57,893 GCSE</b><br><i>(combination of Food Tech, Home Economics and Catering GCSE's)</i><br><i>5.5% of English pupils)</i> | <b>1,818 GCSE vocational equivalent (taken at school)</b>     |
| 16-19 year olds                                  | <b>2,416 Food A Level</b><br><i>(no A-level provision from 2017)</i>  |   |
| <i>Agriculture, Horticulture and Animal Care</i> |   | 34,900<br><i>(2,600 studying Agriculture at Level 2 or 3)</i> |
| <i>Catering and Hospitality</i>                  |   | Approx:<br>35,000 cookery<br>6,500 food service               |
| <i>Formal Apprenticeships (2017 data)</i>        |   | 4,307<br><i>(in catering and hospitality)</i>                 |

## 2.6 Routes to becoming a food teacher

In England, there are now many routes to acquiring 'qualified teacher status' (QTS). A useful table that summarises this can be accessed from the House of Commons Library.<sup>28</sup>

A primary school teacher will learn teaching skills in order to teach a broad spectrum of subjects, and there are generally no specialist routes (except recently for Maths or PE). The Design & Technology Association have reported that most trainee primary teachers might receive only three hours of D&T study (with food being just one part).<sup>29</sup>

In secondary schools, trainee teachers study a relevant course for what they will teach. However, in relation to food they may have expertise in another area of Design & Technology, such as resistant materials or graphics, with food being a second subject. Only a fifth of secondary food teachers have an A-level qualification in Food Technology.<sup>30</sup>

Food teacher numbers have declined in recent years.<sup>31</sup> In 2016, DfE reported there were only 4,500 food teachers across Key Stages 1, 2 and 3, compared to 5,300 in 2011 (this compares to 34,100 English teachers in 2016). For the same period for Key Stage 5 (Years 12 and 13) this reduced further to 600.

## 2.7 Food teacher standards

In early 2015, PHE, the British Nutrition Foundation, the Food Teachers Centre, OfSTED, DfE and the School Food Plan met to discuss the management and provision of food teaching and to develop guidelines for food teaching, to support rigour and set standards. The published guidelines for primary and secondary schools<sup>32</sup> set standards, expectations and requirements for qualified food teachers.

The intention was for the framework to be used to:

- Review and plan courses for trainee teachers, and set out expectations for qualified teacher status.
- Audit current practice by existing teachers, supporting performance related development.
- Support professional reviews with colleagues.
- Plan and run professional training courses to support best practice.

The framework recognises the importance of food teachers supporting a whole school approach by saying that accomplished food teachers '*Use their expertise to support the whole school approach to food education and the provision and development of policies, understanding and promoting the position of food education in the health and wellbeing agenda of the whole school*'.<sup>33</sup>

## 2.8 Supporting food teachers with Continuing Professional Development (CPD)

CPD provision in schools was historically delivered through local authorities, though funding cuts have taken much of this away.<sup>34</sup> Previous surveys undertaken by the British Nutrition Foundation's research with primary school teachers in 2016 showed that only 3 in 10 of participating teachers undertook any food related professional development that year - and most of this was on food safety. In order to further address this issue, the British Nutrition Foundation launched an online professional development training initiative for teachers, entitled: *Teaching food in primary schools: the why, what and how*.<sup>35</sup>

With no formal, centrally organised professional support for food education, individual teachers and schools take on the responsibility to interpret and deliver the curriculum in their own way.

## 2.9 Where do teachers get lesson plans and resources?

There are a wealth of teaching resources and support out there for schools to be able to deliver cooking and food education. A search on the Times Educational Supplement's popular teaching resource portal shows the wealth and scope of resources - 11,985 resources<sup>36</sup> for 'food education'. A search of 'food' gave an even greater 42,636 resources.<sup>37</sup>

Many teachers will devise their own lesson plans and schemes of work. And there are multiple other organisations who offer a variety of food education resources. These come in the shape of formal curriculum and wider whole school approaches, from cookery skills and recipes to food growing, farming and the provenance of food. Such programmes and organisations include the Children's Food Trust's *'Let's Get Cooking'*, the Soil Association's *Food for Life* programme and the British Nutrition Foundation's *Food - a fact of life*.<sup>38</sup> The Countryside Classroom<sup>39</sup> portal also provides a place to access resources from multiple organisations, focused on food, farming and outdoor learning. And then there are the many corporate school offers - voucher schemes for cooking equipment, store or farm visits and competitions.

The next section of this report lays out the methodology used for collecting relevant data and information to inform the current food education learning landscape.

### 3. METHODOLOGY

*“We brought together representatives from across the food education sector to consider what questions we should ask.”*



At the outset of this review we brought together representatives from across the food education sector to consider what questions we should ask in order to establish a baseline around:

- What pupils are learning in their food education lessons following the introduction of the new *Cooking and Nutrition* curriculum three years ago.
- How pupils are learning (who is teaching, what kinds of learning activities are going on, what resources are available, where are pupils learning, how does this vary across key stages).
- How school food cultures support or hinder healthy eating behaviours among pupils.
- We also wanted to find out what pupils, parents, senior leaders and food teachers think can raise the quality of food education and food culture in schools to enable pupils to learn about, and put into action, healthy eating behaviour.

Representatives worked in three groups (Curriculum, Whole School Approach and Behaviour Change) to determine what the focus of our research work should be. They identified the following questions:

### Curriculum

- How are schools interpreting and implementing the *Cooking and Nutrition* part of the curriculum?
- How many schools are meeting national curriculum requirements?
- Is delivery affected by type of school or location? If so, how?
- Who is delivering food education and how?
- How effective has the introduction of *Cooking and Nutrition* in the national curriculum been in terms of increasing the number of children with adequate cooking skills and healthy eating knowledge?
- Does delivery of national curriculum requirements lead to behaviour change?

### Whole School Approach

- How many schools have a whole school approach to food education and what does this look like?

- What food education is being taught formally within the D&T *Cooking and Nutrition* curriculum compared to the food education within wider delivery of curriculum?
- What food education activities are taking place in school, but outside of the formal curriculum? How do these contribute to the delivery of food culture?
- Are whole school approaches effective? If so, why? If not, what can be done to change them? How do we know what is effective?
- What will propel schools from an inclination to have food education, to teaching it at school and creating a whole school food culture?

### Behaviour Change

- What are schools doing to affect behaviour/ attitudes with regard to:
  - Food preparation?
  - Food and drink choice?
- What are the dynamics of getting children to eat and drink more healthily?
- Are food education frameworks effective to help change behaviour? If so, why? If not, what can be done to change them?
- Does a whole school approach to food education enable behaviour change? If so, how?
- How can/do schools create the right environment for behaviour change to happen?

Four key strands of work were commissioned in order to answer these questions:

- A two-part study with senior leaders in primary and secondary schools.
- A survey of food teachers in primary and secondary schools.
- Focus groups with children and young people.
- An omnibus survey of parents.

In addition, informal telephone interviews were held with eight school governors and face to face discussions took place between Jamie Oliver Food Foundation staff and six school catering providers. Working group members were involved in the shaping of research design. Dr Caroline Hart at the University of Sheffield acted as academic advisor to all strands of work. All data collection took place between June and August 2017.

### 3.1 Senior leaders

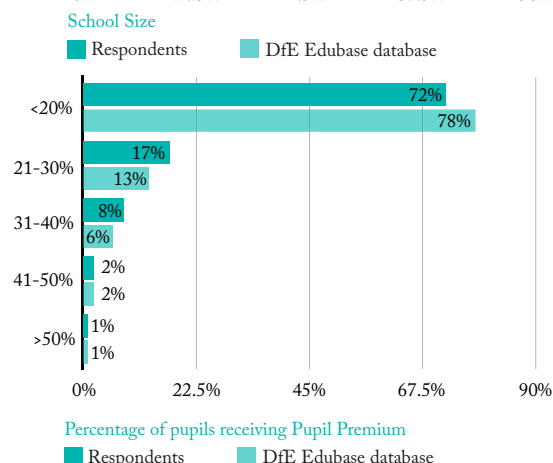
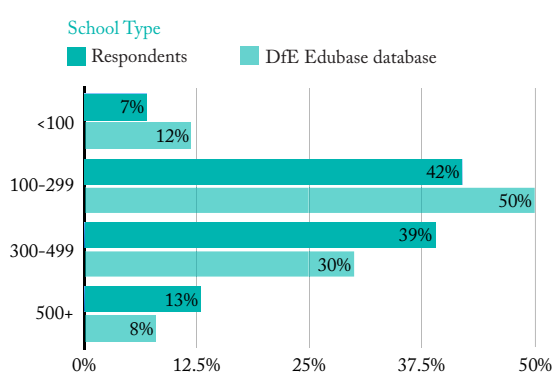
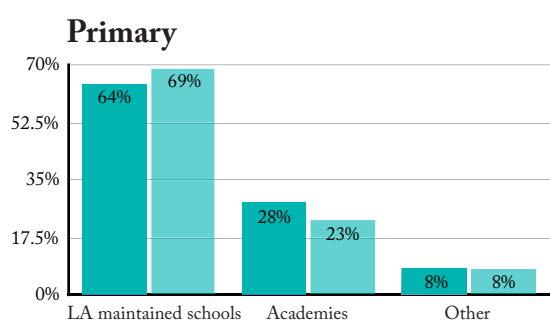
Previous reviews of food in school, such as the School Food Plan and the Food Growing in Schools Taskforce, have found that school leadership is vital in achieving high quality food education supported by a positive school food culture. This research strand was intended to help establish a baseline of food education delivery in schools in England and to build our understanding of senior leadership engagement in, and perspectives on, food education.

Specialist education market research organisation Schoolzone undertook a two-phase survey of senior leaders. Phase 1 of the study was designed to explore the issues and inform the survey work of Phase 2, as well as provide important commentary on the quantitative findings. 50 senior leaders and heads of Design & Technology were briefed by

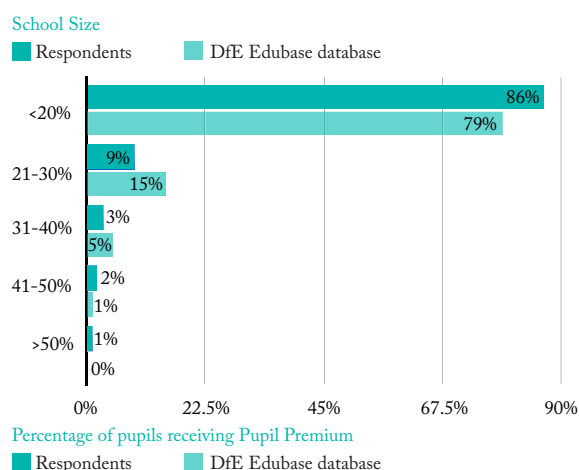
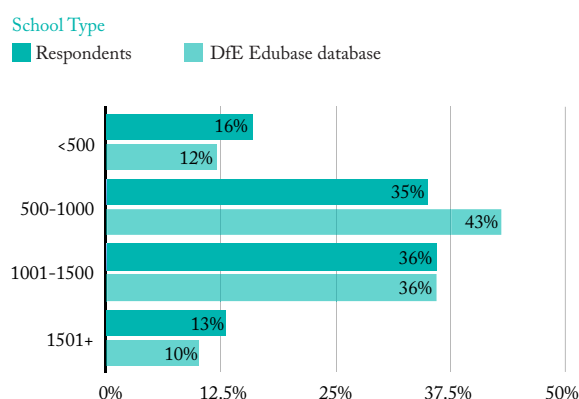
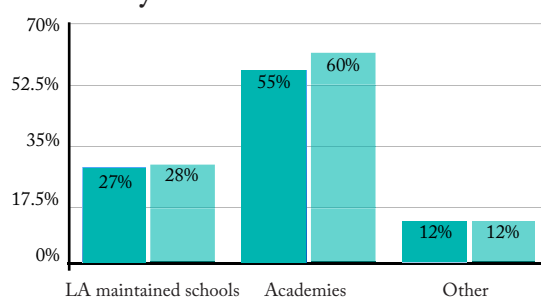
webinar and then took part in a written interview. In Phase 2, Schoolzone recruited participants via their research panel, data was gathered via an online questionnaire designed by the Food Education Learning Landscape Research and Steering groups, and refined in partnership with Schoolzone. 242 primary and 442 secondary responses were obtained. 40% of respondents were from local authority maintained schools, 46% were from academies, and the remaining 14% respondents were from a mix of independent, special schools, colleges, free schools etc.

As can be seen from the statistical charts below, the respondent profile obtained is representative of the make-up of schools as defined by the Department for Education's Edubase database of all schools.

#### Senior Leaders Sample Profile



#### Secondary



## 3.2 School food teachers survey

School food teachers are at the coalface of food education, and as such have key insights on delivery of the food curriculum. We hoped to gain from them a detailed picture of what and how much food education they are delivering and how this fits with national curriculum guidance, as well as their perspectives on the status of food education and wider school food culture, including challenges to high quality food education delivery. The British Nutrition Foundation and Food Teachers Centre designed an online survey, which was distributed via their contact lists and through the wider networks of organisations involved in the Food Education Learning Landscape review.

A total of 1,075 secondary teachers responded, this is nearly a quarter (24%) of all secondary food teachers in publicly funded schools in England.<sup>41</sup> 320 primary teacher responses were received, a lower response rate for primary teachers was anticipated as food is not taught as a specialist subject. For most questions, a minimum of 750 secondary and 170 primary responses were completed.

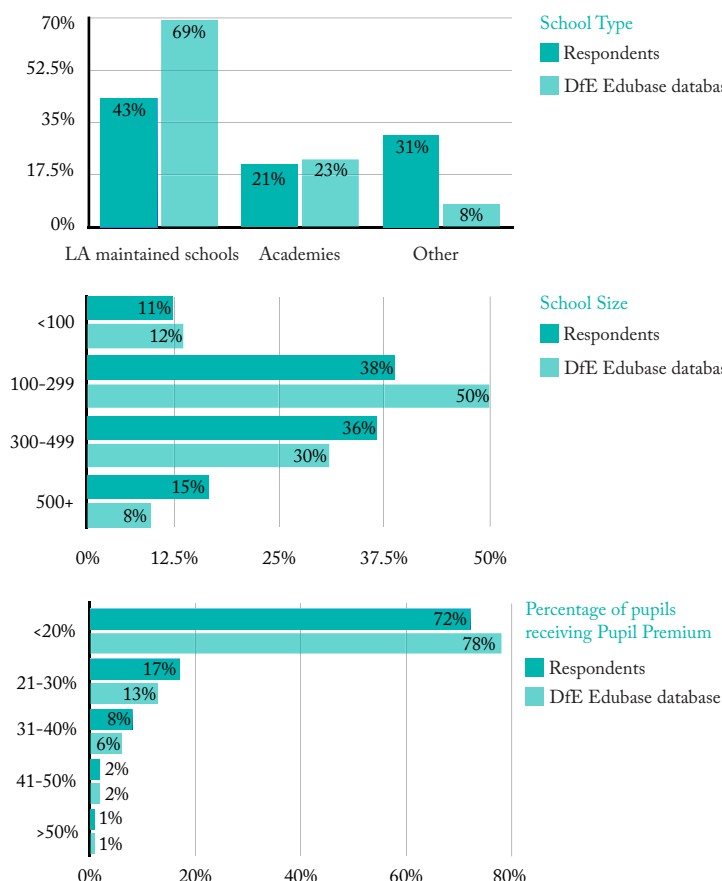
43% of primary school respondents identified themselves as being from local authority maintained schools and 21% were from academies. 50% of primary school respondents were from schools with between 100 and 400 pupils, 10% were from schools with less than 100 pupils. 83% reported that their school has a statutory obligation to follow the national curriculum.

17% of secondary respondents were from local authority maintained schools, 53% from academies. 70% were from schools with between 500 and 1,500 pupils, there were a similar number of respondents with schools with less than and more than 500 pupils (13% and 17% respectively). 47% reported that their school has a statutory obligation to follow the national curriculum.

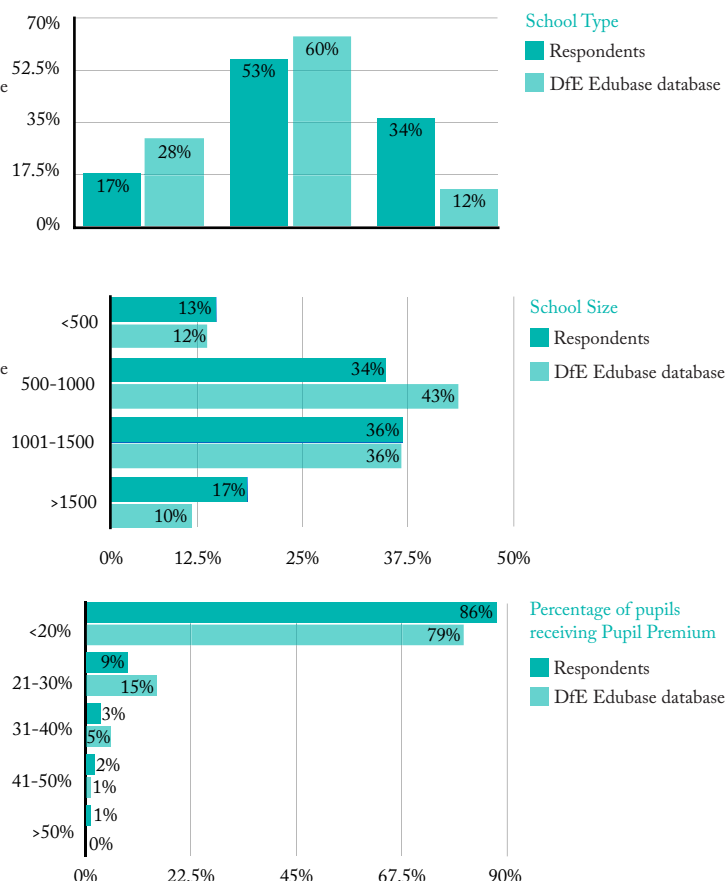
Around half of the sample were located in urban areas, and 1/5 in rural areas. At primary level, 23% were urban schools in a predominantly rural area, at secondary this rose to 27%.

### School Teachers Sample Profile

#### Primary



#### Secondary



### 3.3 Children and young people's focus groups

This strand of work was conducted by an academic team led by Dr Caroline Hart at the University of Sheffield. We felt it was imperative to speak to children and young people in order to understand the impact of curriculum delivery and food education as part of wider school food culture, as well as to explore whether the interaction of these two factors is leading to positive food behaviours. The Jamie Oliver Food Foundation worked with two local authorities with which it had existing relationships to recruit schools. A sampling frame was developed using three characteristics: percentage of pupils receiving pupil premium; known level of engagement with food education; and urban/rural setting.

25 focus groups, took place over a period of one month. 240 children and young people from 13 schools (7 primary schools and 6 secondary) took part. Observations of the school food environment and culture were also made and, where possible, researchers spoke to teachers and headteachers. Researchers used photographs, cooking utensils and food items as stimuli for discussions around different aspects of the food curriculum. Pupils took part in participatory research activities, including drawing and mapping exercises, which served as openings for discussions of the wider school food education environment and food culture. Pupils took the researchers on school walks and took photographs of locations in their school that prompted them to think about food. Ethical approval for the research was granted by the University of Sheffield. All schools, pupils and their parents gave informed voluntary consent for participation.

### 3.4 Parents' survey

Parents are a critical part of any school community. We wanted to understand how they view the importance of food education and their experiences of, and opinions on, school food culture. We were particularly keen to know more about their views on the use of food as part of rewards, fundraising and celebration as this had emerged as a key theme from the focus group work with children and young people. We also wanted to understand more about their appetite for engagement with schools on school food education and culture. Survey questions were designed by the Food Education Learning Landscape review team. Specialist polling organisation Populus interviewed a nationally representative sample of 573 UK adults 18+ with children aged 18 or under from its online panel. Surveys were conducted across the country with quotas set on age, gender and region. The results were weighted to the profile of all adults using age, gender, government office region, social grade, taken a foreign holiday in the last 3 years, tenure, number of cars in the household and working status.

See opposite page for graphical representation.

### 3.5 Analysis

Data from each of the strands was analysed by the relevant commissioned organisations. The findings were then brought together using the framework of Curriculum, Culture (the whole school approach to food education) and Choice (the food behaviours that children are adopting), additional sub themes were developed iteratively as data was reviewed.

# PARENT SURVEY SAMPLE PROFILE

## METHODOLOGY AND SAMPLE PROFILE



### Methodology

Online omnibus survey with the general public



### Sample Size

573 UK adults with children aged 18 or under



### Fieldwork Dates

2nd-3rd August 2017



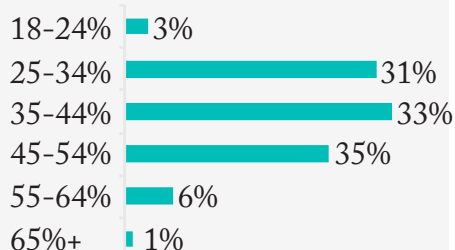
60%

### Gender

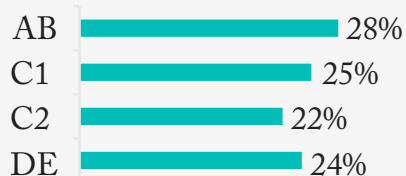


40%

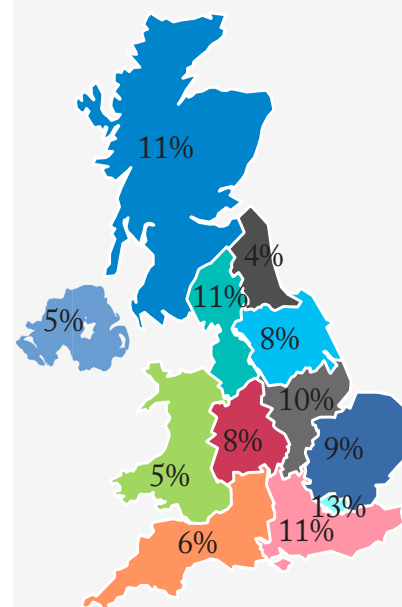
### Age



### SEG



### Region



## 4. FINDINGS

*“How food education and school food culture currently impact on pupils’ capability, opportunity and motivation, and therefore food behaviours.”*

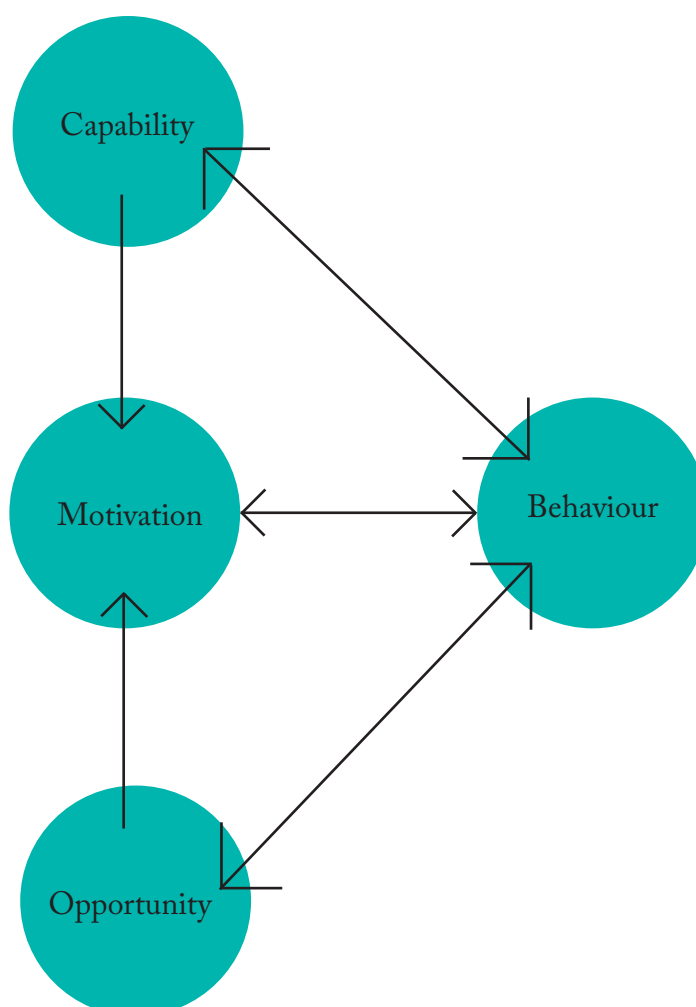
## 4. 1 Introduction and overview

The School Food Plan (2013)<sup>42</sup> called for a whole school food culture, recognising that neither balanced school meals nor food education alone were sufficient to enable children to live well and eat healthily. This focus on school culture and ethos chimes well with Michie et al's COM-B model of key factors that shape behaviour.<sup>43</sup> This model describes how an individual requires the *capability*, *opportunity* and *motivation* in order to adopt a certain behaviour. In developing our surveys and qualitative fieldwork with pupils we also drew on Amartya Sen's capability approach<sup>44,45</sup> which highlights the importance not only of resources, such as education and healthy food, but also of the ability of individuals to 'convert' those resources into ways of being they have reason to value. In the context of this review, we were specifically interested in the freedom (capability<sup>46</sup>) children have to choose

and eat healthy balanced diets, not only in terms of their knowledge, and the availability of appropriate food, but also in relation to social norms and environment within the school that might encourage or discourage healthy choices.

We have therefore explored the extent to which the new national curriculum is enabling pupils to have opportunities to develop key knowledge and skills through their food education. We also explored the relationship between what pupils are learning in food education and whether they are able to put their learning into practice in their school environment. We wanted to know whether pupils' wider school ethos and environment mirrored and supported their food education.

## COM-B MODEL OF BEHAVIOUR CHANGE\*



\* Michie et al. Implementation Science 2011, <http://www.implementationscience.com/content/6/1/42>



## 4.2 Overview of our findings

We found that the new national curriculum for *Cooking and Nutrition* education contains many of the vital ingredients needed to support pupils in developing knowledge and skills to enable them to prepare and cook healthy meals and to understand what constitutes a healthy and balanced diet. In particular, the new curriculum has led to pupils participating in learning which has enabled them to begin to develop knowledge and skills related to food origins, food preparation and healthy eating. This is a crucial first step.

Some schools showed good practice, however other schools have struggled to implement the new curriculum. We also found that there are some key elements missing, particularly related to opportunity (physical and socio-cultural) and pupil motivation.

The findings are presented in three core sections:

- The first focuses on **Curriculum** and our first key issue related to developing pupils' knowledge and skills in line with the new national curriculum guidelines for KS1-3 on *Cooking and Nutrition*.
- The second section turns to report findings on school food **Culture** in line with our interest in the opportunities that schools are giving children to practice healthy food behaviours.
- The third section offers findings that illuminate the **Choices** children are making in their daily food practices in schools, helping us to learn more about how we can work together to further support pupils' healthier food choices and learning opportunities for cooking and preparing balanced meals.

We then bring the findings together in a discussion section where we reflect on how food education and school food culture currently impact on pupils' *capability, opportunity and motivation*, and therefore food behaviours.

## 4.3 FINDINGS: CURRICULUM

*‘Although significant progress has been made, there is still a long way to go and in many schools nationwide, the picture of food education gives cause for concern.’*

### 4.3.1 Introduction

There is strong support from parents and carers for food education. Almost all (around 9 in 10) parents and carers thought it was important that primary and secondary pupils are taught about where food comes from, how to apply learning about healthy eating and nutrition, and practical cooking and food preparation skills. We found some encouraging examples of schools delivering comprehensive food curricula that engage their pupils and succeed in developing key knowledge and skills as set out in the new national curriculum for *Cooking and Nutrition*.

However, the evidence from our comprehensive review indicates that although significant progress has been made, there is still a long way to go, and in many schools nationwide the picture of food education gives cause for concern. This section of the report considers how, and how far, different elements of the curriculum are being implemented and the reported challenges to delivering high quality food education.

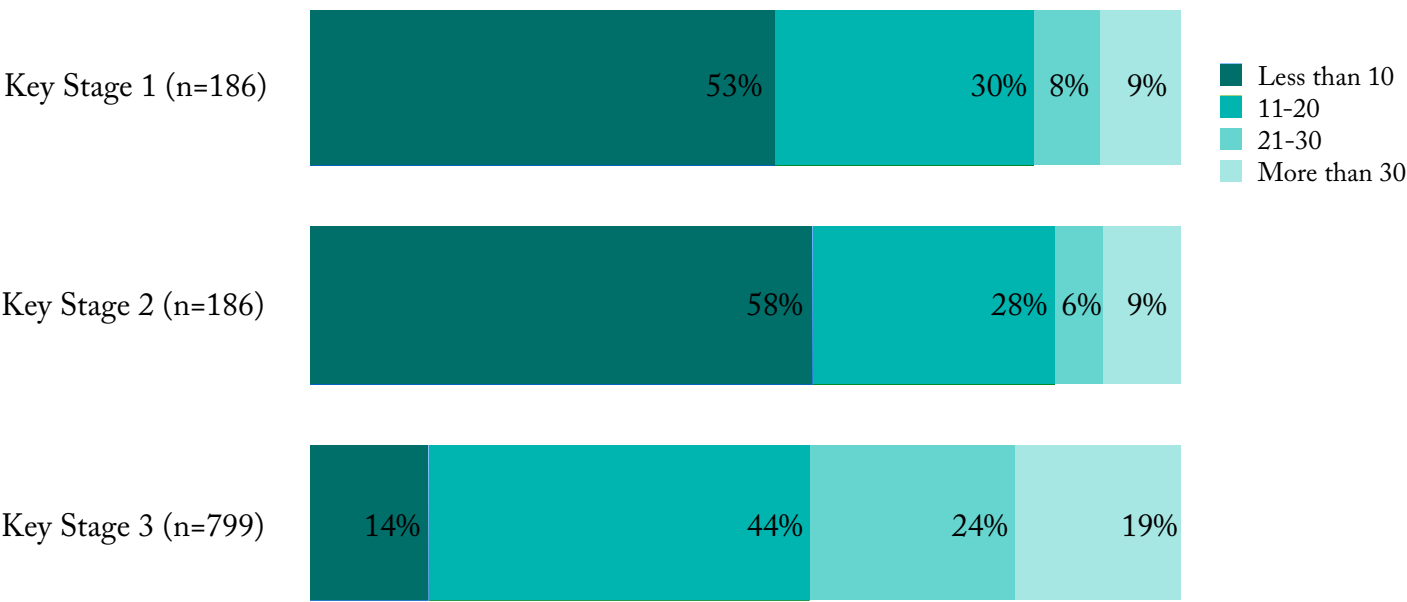
## Summary

The new national curriculum guidelines are broadly being implemented, however there is great variation in the quantity (frequency and duration), content and quality of children and young people's food learning opportunities.

- **Food education is not meeting pupils aspirations for their learning.** Many report wanting more complexity and challenge and opportunities for experiential learning
- **The development of pupils' food education knowledge is incomplete.**
  - Although most primary and secondary pupils are aware to some extent of the principles of healthy eating, depth of knowledge varies considerably, and there is concern that each Key Stage repeats, rather than builds on, prior learning.
  - Knowledge about the origins of food is patchy at both primary and secondary level.
  - Pupils also report that they would like to learn more about how to prepare complete meals and cook on a budget.
- **There are limited opportunities for pupils to develop cooking and healthy eating skills.**
  - In some primary schools, practical cooking education experiences are poor. This is inhibiting pupils' development of cooking and food preparation skills.
  - There is limited evidence of pupils being taught how to apply the principles of a healthy diet in their daily food choices, e.g. learning about decision-making and how to deal with social influences.
- **Schools provide limited opportunities for pupils to learn about how to apply their knowledge and skills.** This is both within food education lessons and across the wider school environment.
- **Food teachers report that they are heavily constrained in their delivery of food education by a lack of training, time, budget and facilities.**
  - At primary level, more than half of pupils receive less than 10 hours a year and at secondary more than three in five schools deliver less than 20 hours a year. Many secondary school teachers report that lesson time for food education has reduced over the last three years.
  - Teachers report that they do not have the facilities such as cooking utensils and cookers they need, nor the budget to replace broken items. They also frequently report purchasing ingredients for lessons with their own money as there is insufficient budget available.
  - Class size inhibits the teaching of cooking skills, such as knife skills and cooking with ovens.
  - Only 1 in 4 primary teachers and just over half (52%) of secondary teachers reported that most staff in their school had received CPD in food education in the last three years.
- **Food education has a low status within many schools.**
  - Only 2 in 5 primary teachers felt the status of food education in their school was good or excellent and 1 in 3 felt it was poor.

4.3.2. Opportunities for learning about food and nutrition are limited

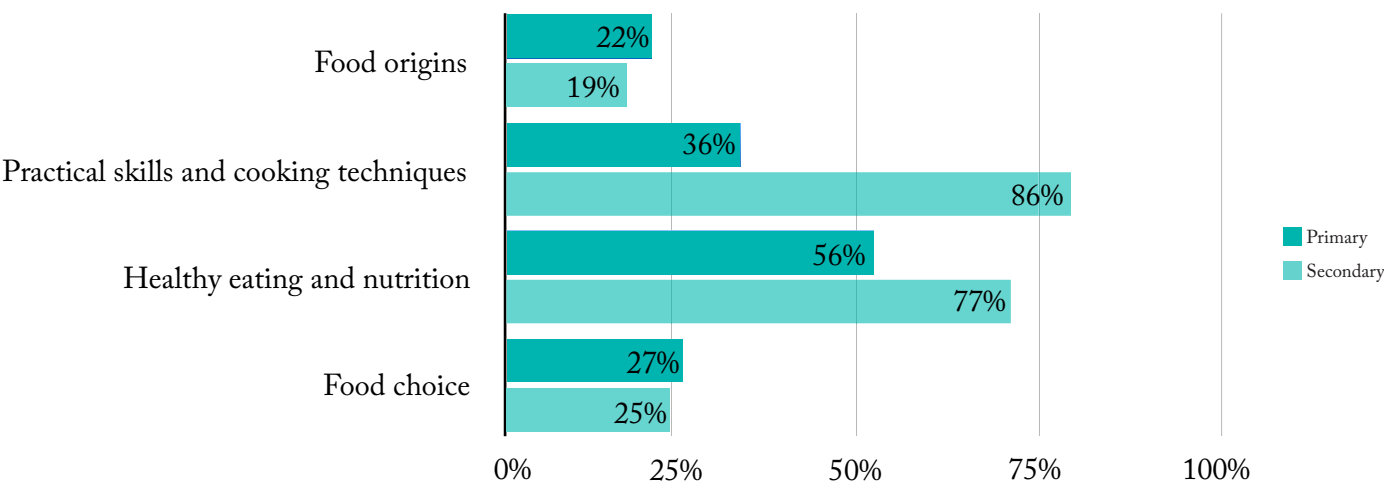
Teacher reported average hours spent per school year on food education by Key Stage



There is significant variation in the amount of time pupils spend learning about food. Food teachers told us that in more than half of primary schools, pupils get less than 10 hours a year, but one in ten get more than 30 hours. Time increases in secondary

provision, with half of teachers reporting that pupils receive between 11 and 20 hours a year at Key Stage 3. However, between 11% and 16% of teachers reported that pupils receive less than 10 hours food education a year in Years 7-9.

Emphasis placed on different elements of the cooking and nutrition curriculum



Percentage of teachers reporting they place a significant emphasis on curriculum area

4.3.3. National curriculum guidelines on *Cooking and Nutrition* are being implemented. However, inconsistency in delivery is a cause for concern

Two out of three (65%) primary and 86% of secondary teachers reported that they followed national curriculum guidance on food education which set out that pupils should learn about the *origins of food, cooking and preparation and the principles of nutrition and a healthy diet*.<sup>47</sup> We found that the national curriculum, guidelines on *Cooking and Nutrition* are being implemented to a degree in primary and secondary schools. In some primary and secondary schools we visited, careful thought had been given to the design and delivery of a comprehensive curriculum. However, inconsistency in food education across primary and secondary

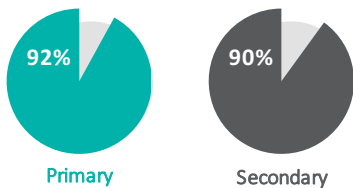
schools is a cause for concern in terms of the frequency of opportunities to learn about food and nutrition, what pupils are learning and the quality of pupil experiences.

Nearly all parents surveyed think it is important that cooking and nutrition education are provided. However, currently only 54% said that they were satisfied with the education provided in their eldest child's school and 14% said they were dissatisfied. A further 32% were either neutral or ambivalent in their view of education provided.

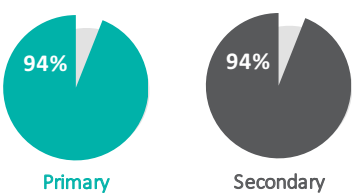
# PARENTAL SATISFACTION WITH FOOD EDUCATION IN SCHOOLS

Net: Very/Fairly important & Net: Very/Fairly satisfied

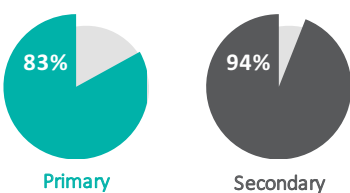
Schools teach children about where food comes from



Schools teach children how to apply learning about healthy eating and nutrition



Schools teach children practical cooking and food preparation skills



Cooking and nutrition education provided

Satisfied

Dissatisfied



#### 4.3.4 Food origins

i) There is significant variation in the extent to which pupils are learning about food origins.

Only about 1 in 5 teachers at primary said that they placed a significant emphasis on where food comes from. This was reflected in the findings from children and young people. Children in some primary schools reported having learnt about food provenance and seasonality in school, and were able to talk confidently about these issues. However, in other schools, children did not recall learning on these topics. In some schools, food origins had been discussed as part of wider topics, such as history or the environment. It was often when describing food growing in a school garden or allotment and visits to farms that pupils discussed seasonality and provenance. These experiences had excited them and caused them to reflect on issues such as animal welfare, food miles and environmental impact. *“You could be horrified by what happens or you could find it good that it’s local and free range, I find it better because if you see it, you know what happens and you are aware of it.” (Year 6 pupil).*

Only about 1 in 5 teachers at secondary level said that they placed a significant emphasis on where food comes from. There was also significant variation in what pupils could recollect learning about food origins. Some were able to recall a good deal about issues such as food miles, seasonality and animal rearing and the production of meat and dairy foods, while others recalled very little or no learning. Those pupils that could remember particular lessons about food origins and seasonality described learning through worksheets, videos, independent computer based research, presentations from their teacher and mind mapping. All such learning at secondary level had taken place as part of food technology lessons. Depth of learning was best amongst those taking GCSE Food and Nutrition.

#### 4.3.5 Food preparation and cooking

i) Whilst most primary pupils have practiced a range of cooking skills, others have barely prepared food at all.

In many schools the frequency and duration of opportunities to prepare and cook food are limited. Only 1 in 3 primary school teachers said that they placed a significant emphasis on practical skills and cooking techniques in their food teaching. Less than half of primary school teachers told us that pupils get the chance to practice food and cooking skills more than twice a year.

Most primary pupils we spoke to were able to recall having used a range of cooking utensils and equipment to prepare a variety of sweet and savoury dishes. In some schools we visited, cooking and preparation were integrated across the curriculum with frequent opportunities to make food (in some as often as once a week). In these schools, children described having used a range of techniques (peeling, chopping, using sharp knives, grating, weighing, working at a stove) and ingredients to cook a number of sweet and savoury dishes, and described these experiences with excitement. *“It makes you feel really satisfied, because when you see the end result it might be what you expected, it might not but it’s just really satisfying because you’ve created” (Year 6 pupil).*

In some primary schools we visited pupils of all ages struggled to recall opportunities to prepare food, and where they had they had used very few techniques if any. The quality of practical cooking experience for some primary pupils was very poor. They described these experiences negatively, it *“was quite boring because I thought we was actually going to try and make the dough, and maybe make the sauce, and chop up the things, but we obviously didn’t. (Year 6 pupil).*



#### 4.3.6 Secondary school pupils report having practiced a range of food preparation and cooking techniques

At secondary level, there is a strong focus on practical skills and techniques with 86% of food teachers reporting that this had a significant emphasis in their food teaching. Many pupils were able to describe a number of dishes they had prepared and cooked in varying levels of depth. Generally, they described these experiences with enthusiasm. *“It was like investigating, you was figuring out how to make stuff and what you had to do, and it was kind of like exciting, finding out how to do it and you feel positive because you feel like you can do it again and want to do it again.”* (Year 7 pupil). Others felt that food technology lessons were boring as they were cooking dishes they had previously prepared in primary school.

Some pupils described how the dishes they had made had been new to them, both in terms of food preparation and eating and a few said that they had made them again at home. However, pupils are generally not creating, or being offered, lasting records or resources to enable them to recreate dishes prepared in class on future occasions at home. For example, very few pupils we spoke to had records of the recipes they had used or notes on methods and skills they had learned.

#### 4.3.7 The principles of a healthy diet and nutrition

i) Although most pupils have learnt some basic principles of nutrition and a healthy diet, depth of knowledge varies considerably, and there is concern that each Key Stage repeats, rather than builds on, prior learning.

Although pupils at all ages were familiar with the Eatwell Guide, it was not evident (with the exception of some GCSE food technology students) that at each Key Stage pupils were gaining an enhanced knowledge or understanding of the different nutritional properties of various foods or their contribution to health and wellbeing as part of a balanced diet.

56% of primary teachers said that they placed a significant emphasis on healthy eating and nutrition theory. At primary level there was a stark contrast between those pupils who had learnt a lot about the principles of a healthy diet and those who had not. In some schools, pupils were able to describe with

confidence the principles of a healthy diet, name different food groups and the foods within them and, to a lesser extent, describe their contribution to growth and wellbeing. In other schools, although pupils understood the importance of a healthy diet, they were often confused or lacked understanding of what constitutes a healthy diet. In particular, they felt that a balanced diet was one in which *“Every now and then you eat unhealthy so you have sugar in you, so you won’t want to make yourself ill because you’ve not got enough sugar in you”* (Year 6 pupil). In one school, Year 6 pupils conflated a healthy diet with a diet for weight loss.

77% of secondary teachers said that they placed a significant emphasis on healthy eating and nutrition theory. Some pupils were able to recall learning about food and healthy eating in PE or Science lessons, or in form time, but this was rare and generally not in depth. Food diaries had been used in secondary schools as both a successful and unsuccessful tool for learning about and applying the principles of a healthy diet. In one school as part of food technology, Year 7 pupils had kept a food diary for a week and reviewed it against Eatwell Guide recommendations: pupils had been supported by their teacher to reflect on their diet, and consider what changes they could make to improve its balance.

Pupils described the changes they had made as a result *“I wanted to eat more fruits, because there wasn’t much in the fruit stuff, but a lot of vegetables, and I have started to have apples, and the other day I had strawberries on bran flakes.”* (Year 7 boy). In a contrasting experience in a different school, pupils had reported their food intake during form time for a week. They described how there was limited discussion of the data collected, *“So they were trying to keep track of our food, but then they wouldn’t explain why our choices were bad, or why they were good, or why we need to eat certain things, how it would help.”* (Year 10 pupil). This was certainly a missed opportunity.



#### 4.3.8 Many pupils are not being given the opportunity to learn about applying their food learning

Personal motivation to prepare, cook and eat healthy food is vital to achieving healthy food practices among children now and in the future. Most pupils are not receiving learning opportunities to help them to develop and reflect on their values and aspirations in relation to their food habits and cooking and food preparation skills. Despite the high levels of emphasis on healthy eating and nutrition theory at both primary and secondary level, only 1 in 4 primary and secondary teachers said that they place significant emphasis in their food teaching on *food choice*. However, in some primary schools, children described how their teachers guided their food choices, including as part of the daily registration process.

It became clear that although secondary pupils were able to describe the principles of a healthy diet, they experienced challenges in applying this learning and they struggled to navigate the often poor school food environment to make healthy food choices. *“It’s harder to make healthy choices as well, cos there’s hardly no fruit up there, nothing, no fruit or vegetables”* (Year 10 pupil).

With some exceptions, there was little evidence that time had been spent discussing with pupils their values and aspirations around food and health and wellbeing in a way that would support them to make healthy choices. Secondary pupils stated that they rarely, if ever, have conversations with non-food teaching staff about food choices.

#### 4.3.9 Experiential learning is a valuable part of food education

Pupils of all ages remembered particularly clearly what they had learnt through hands on experiences such as food preparation and cooking and food growing in school, as well as visits they had made with school to farms, farmers markets, restaurants, and supermarkets. There is strong evidence in the literature that experiential learning can support learning outcomes.<sup>48</sup> However, the frequency of opportunities for food education through experiential learning, particularly in terms of off-site visits, varied considerably.

Some primary school children were able to recall multiple off-site visits where they had learnt about food, others were unable to recall any. Those that did recall, described how they had contributed to their learning *“Throughout being at this school it’s definitely changed a lot of my views on things, like just going to different places, it makes you think about it more. It encourages you to think about what you are doing more, think about what you are eating more.”* (Year 5 pupil).

76% of primary school teachers reported that food education sometimes takes place in a garden or allotment, with 1 in 5 saying that this happens more than twice a month. Where delivered well, gardening seemed particularly useful in supporting learning about food origins, but had also got children excited about fruit and vegetables and raised their awareness of healthy eating. There was also evidence of poor use of school gardens. In one school, the vegetable garden had been fenced off and had gone to ruin. Children had been told they could not eat apples and pears from the fruit trees at the edge of the garden because they were poisonous.

Most secondary school pupils said that they had not had any off-site visits as part of their food education, (even in a school that was adjacent to a farm) and some added that this would be something that would help their learning. *“I’d kind of like to go out there and see where the food actually comes from, like go to a farm or something like that, where we just see like images of it on the PowerPoint and we just note it down on the mind map, that’s sometimes a bit boring, but I think if we actually went out and did a worksheet, like walking around a farm, like seeing milk being made, I think that would be quite interesting.”* (Year 10 pupil).

Only about 1 in 5 secondary teachers reported that food education takes place in a school garden or allotment. Many secondary pupils were unaware food growing was taking place at all at school, and others were vague as to where the school garden was (if there was one), and had certainly never been inside it.

Food education experiential learning opportunities are sometimes offered through the provision of extra-curricular clubs. Many primary schools offer food based extracurricular activities, but this is rare in secondary schools. Extra curricular activities are used as a way of supplementing the formal

curriculum and can raise the profile of food and nutrition in some schools. Two thirds of primary school teachers told us they had a gardening club in their school and over half (49% at KS1 and 62% at KS2) offer a cooking club. At secondary level, the extracurricular offer is much lower: around 1 in 8 teachers reported having a cooking club and only 1 in 16 reported having a gardening club for Years 7 and 8. Provision drops even further in Year 9.

#### **4.3.10 Pupils' aspirations\* for their food education are not being met**

Both primary and secondary pupils in some schools said that they wanted more complexity and challenge from their food education.

At primary level, additional complexity and challenge was often about being able to use cooking equipment, such as peelers, graters and sharp knives. Most primary pupils reported using this equipment at home, and were frustrated at not being given the opportunity to do so when preparing food in school. Primary pupils also talked about wanting to be prepared for later life. They felt strongly that they wanted to learn how to prepare balanced meals in order to ensure their wellbeing when they left home, *"We should have more lessons on cooking, because when we are older and we have our own houses and things, we need to learn how to cook to live so we need to be taught more cooking so we feel more comfortable"* (Y6 pupil).

At secondary level, pupils felt that they would like to both prepare more complex dishes and learn in more depth about other aspects of the food curriculum, for example the nutritional properties of different foods, and which foods to eat when, to prevent hunger, and why. *"I think we need to be taught how to have a healthy diet, and when to eat the correct foods and when it's suitable... Like whether to snack or stuff like that, not to snack cos that's the worst because we get hungry and then eat something that's not that good"* (Year 10 pupil).

Secondary pupils also had aspirations for their practical and theoretical food education to prepare them for later life. They talked about being able to cook for themselves at university and some were thinking even further ahead *"If you were pregnant, when it comes to it, knowing what you need to make sure the baby's healthy, but if I didn't took this [catering*

*GCSE] I wouldn't know what you'd even need when you were pregnant, or other situations"* (Y10 pupil). A number of pupils expressed that the learning they had done in KS1-3 would not prepare them adequately *"You can't live off fruit salad for the rest of your life."* (Y10 pupil). For some pupils, being able to cook for themselves and their family was important now, as they were the first person home in their household and wanted to prepare food for the rest of their family.

#### **4.3.11 Teachers are constrained in their delivery of food education by a lack of time, budget and resources and limited opportunities for continuing professional development**

When thinking about the curriculum gaps and challenges discussed above, it is important to consider the context in which food education is being delivered and the resources available for curriculum delivery (time, budget, facilities and skills). Food teachers and senior leaders described a number of barriers to delivering high quality food education. Challenges centred on the time and budget allocated to food education, along with the class size and availability of adequate facilities and opportunities for food education CPD.

##### **i) Time**

Over two thirds of food teachers and senior leaders in primary and secondary school said that time was a fairly or significant challenge to delivering high quality food education.

Only a quarter of primary teachers agreed there is sufficient time allocated in the timetable to deliver all of the knowledge and skills identified in the national curriculum for *Cooking and Nutrition*. However, 44% of primary teachers said that the time allocated to food education had increased over the last three years, indicating the new curriculum may have had a positive impact. We saw examples of primary schools maximising time available for food education by integrating it across the curriculum.

Only one third of secondary teachers agreed there is sufficient time allocated in the timetable to deliver all of the knowledge and skills identified in the national curriculum for *Cooking and Nutrition*. 46% of secondary teachers reported that time had

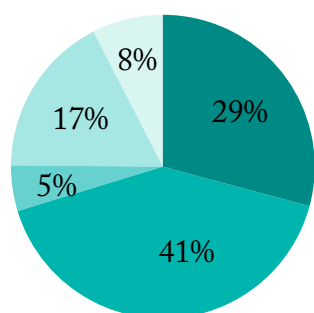
\* For more detailed discussion of the role of aspirations in developing pupil capabilities see Hart, C.S. (2012) *Aspirations, Education and Social Justice - Applying Sen and Bourdieu* (London, Bloomsbury).

increased over the last three years, and 44% reported it had reduced, indicating a widening gap in the hours of food education pupils receive. Concern was expressed by secondary food teachers in terms of both the total time in the curriculum and the time allocated to each food lesson. They reported that the

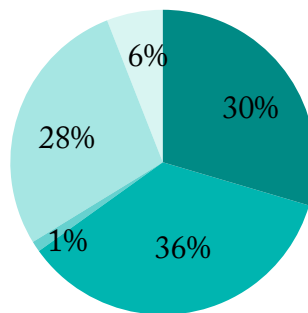
lack of time available hampers their ability to deliver the breadth and depth of the curriculum. *“Time is a massive factor on the food that can be prepared and cooked in lessons. Hour lessons are ridiculous, stressful and constraining” (secondary teacher).*

## Time as a barrier to delivering high quality food education

### Primary Teachers



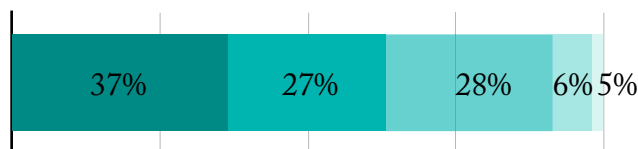
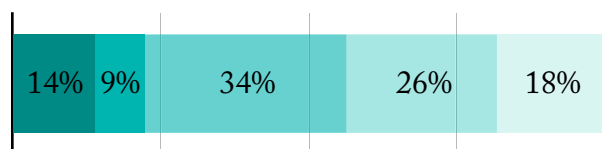
### Secondary Teachers



There is sufficient time allocated in the timetable to deliver all of the knowledge and skills in the national curriculum for cooking and nutrition

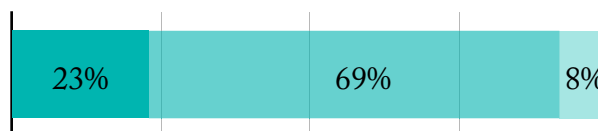
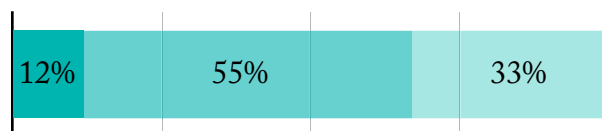
Strongly disagree Disagree Unsure Agree Strongly Agree

Over the last three years the amount of lesson time spent on food education in my school has:



Reduced a lot Reduced a little Stayed about the same Increased a little Increased a lot

In 2017/18 I believe time allocated to food lessons will



Decrease No change Increase

### ii) Budget

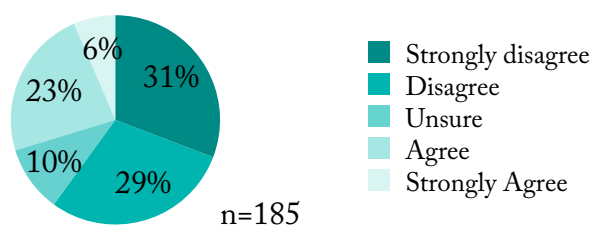
Nearly three quarters of primary and secondary senior leaders and three in five primary and secondary teachers said that budget was a challenge to delivering high quality food education.

Less than one in three primary teachers said that they have sufficient budget to deliver all of the knowledge and skills identified in the *Cooking and Nutrition* national curriculum. 36% of primary teachers report that over the last three years, the budget for food education in their school had reduced, a quarter said it had increased.

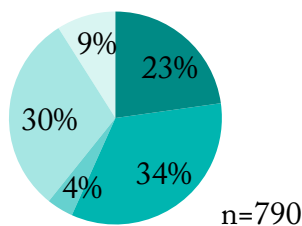
Only two in five secondary teachers said that they have sufficient budget to deliver all of the knowledge and skills identified in the *Cooking and Nutrition* national curriculum. They raised concerns over being unable to replace broken equipment, improve unsafe teaching rooms and provide cooking ingredients for their pupils. A number of teachers reported spending their own money to buy ingredients, including for pupils who were unable to afford them. 65% of secondary teachers reported that their budget had decreased over the last three years, including 37% who said it had reduced a lot. Nearly half (47%) of secondary teachers anticipated further budget decreases in the 2017/18 academic year.

## Budget as a barrier to delivering high quality food education

### Primary Teachers

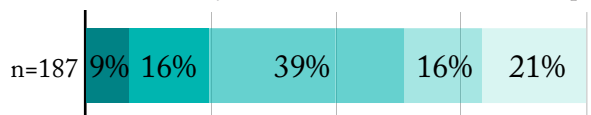


### Secondary Teachers

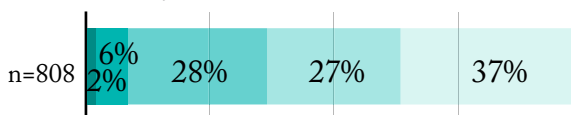


There is sufficient budget allocated in the timetable to deliver all of the knowledge and skills in the national curriculum for cooking and nutrition

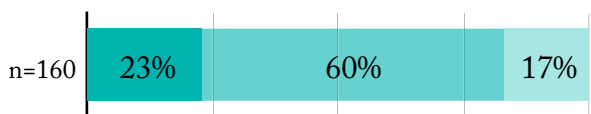
Over the last three years the amount of lesson time spent on food education in my school has:



Increased a lot Increased a little Stayed about the same Reduced a little Reduced a lot



In 2017/18 I believe time allocated to food lessons will:



Decrease No change Increase



### iii) Facilities and resources

A lack of facilities and resources is impacting on the ability of teachers to stretch pupils and meet their learning aspirations. Less than half of primary teachers and secondary teachers said that they have sufficient facilities and resources to deliver all of the knowledge and skills identified in the national curriculum for *Cooking and Nutrition*. Three in five senior leaders and about half of food teachers said that adequate teaching resources and equipment were a challenge to delivering high quality food education in primary and secondary schools. Related to this is the issue of class size where approximately half of food teachers and senior leaders reported

this to be a challenge to delivering high quality food education "Class sizes are too big. You can't accurately assess a class of 26 all cooking at the same time. It's a fantastic job but teaching 26 students to cook with the potential risks involved makes for very tired teachers" (Secondary teacher).

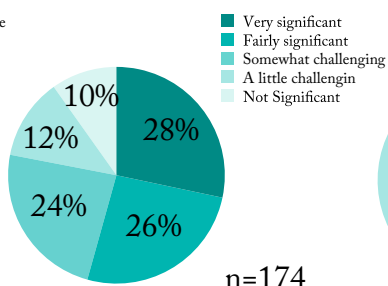
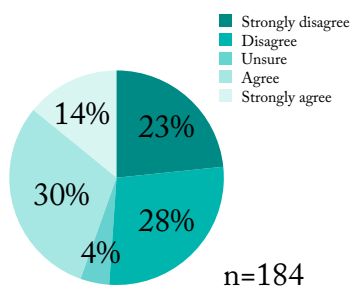
In more than half of secondary schools the ratio of cookers to pupils was 1:3 or less. Teachers also complained about the appropriateness of the facilities they do have; "There should be compulsory allocation of cookers...we have three working cookers per class of 25! We also have two cookers which the ovens don't work on but the hobs do!"

## Facilities and resources as a barrier to delivering high quality food education

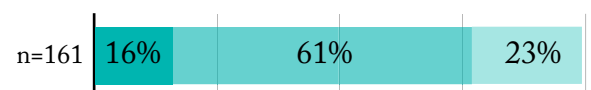
### Primary Teachers

How strongly do you agree there are sufficient facilities and resources available?

How much of a barrier is class size?



In 2017/18 I believe teaching resource provision will:

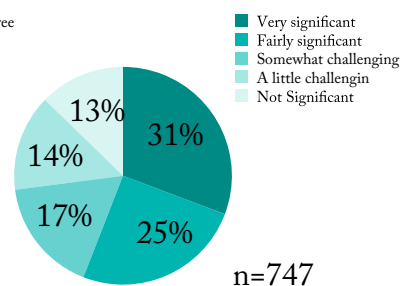
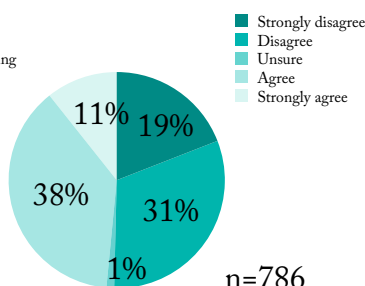


Decrease No change Increase

### Secondary Teachers

How strongly do you agree there are sufficient facilities and resources available?

How much of a barrier is class size?



In 2017/18 I believe teaching resource provision will:





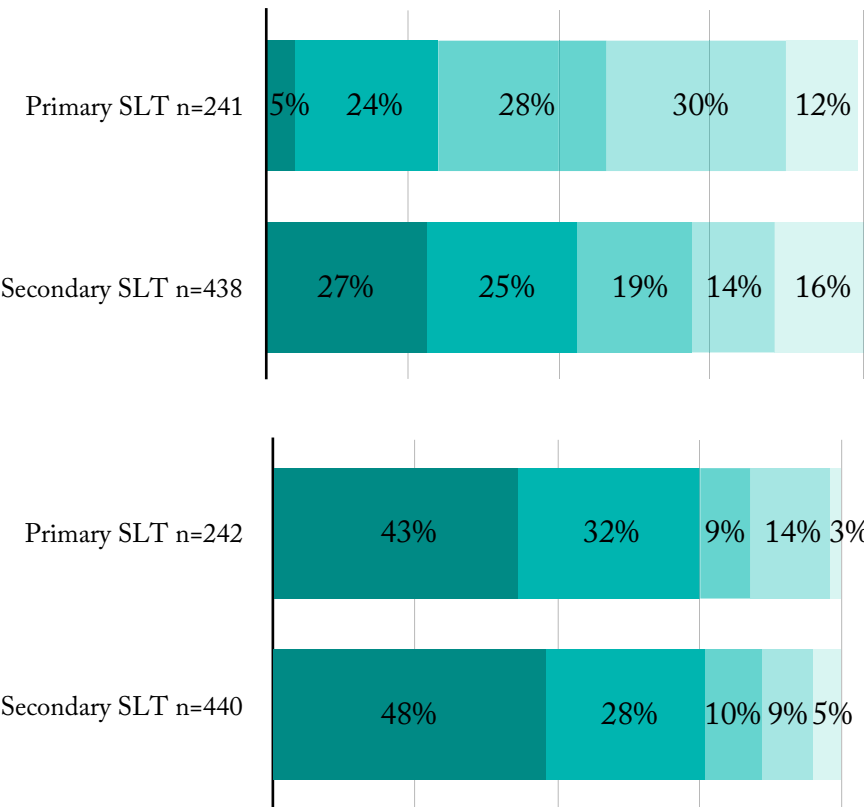
iv) Teaching expertise and Continuing Professional Development

Primary school teachers reported that in more than half of schools' food education is delivered by a class teacher, and in one third by a teaching assistant. They also said that education is generally taught in cross curricular themes (86%). Pupils in some primary schools described to us in detail a number of cooking and nutrition activities that were integrated into and supported learning across the wider curriculum including literacy and numeracy.

Food education delivery is very different at secondary level, and is very much the focus of food teachers alone. Only about 1 in 20 secondary teachers reported that science teachers, PE teachers and PSHE teachers contribute significantly to

food education at Key Stages 3 and 4 and around two thirds of food teachers said that teachers from these subjects never contribute. Similarly, only 1 in 4 secondary food teachers reported that food education is sometimes or often taught in cross-curricular themes. Secondary food teachers raised concerns about a lack of specialist food teachers. Some reported a trend towards food education being delivered by teachers whose specialisms were in other areas, but had been asked to teach food education. 92% of secondary teachers felt that food education and cooking nutrition should be taught by specialist teachers, however, many reported that this was not the case in their school. *"There are now no specialist teachers and this has impacted on passion to progress the subject"* (Secondary teacher).

Staff training and experience as a barrier to delivering high quality food education



How much of a challenge is staff training and experience to delivering high quality food education?

- Very significant
- Fairly significant
- Somewhat challenging
- A little challenging
- Not significant

Most staff in our school have received CPD in the last three years to enable them to deliver food education and to enhance our understanding of a good food culture

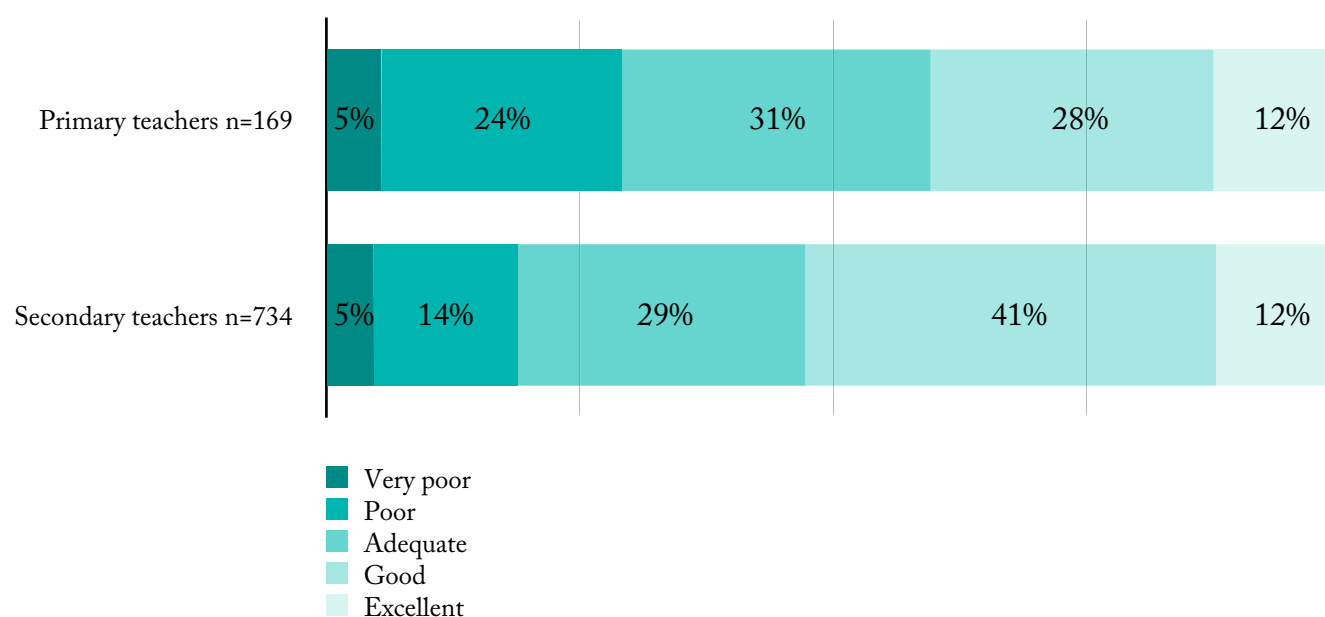
- Very significant
- Fairly significant
- Somewhat challenging
- A little challenging
- Not significant

Staff training and experience was highlighted as a concern by both teachers and senior leaders. Only 1 in 4 primary teachers and just over half (52%) of secondary teachers reported that most staff in their school had received CPD in the last three years to enable them to deliver food education and to enhance their understanding of a good food culture. At primary level this is worrying given that most

teachers would be delivering at least some elements of food education. In both primary and secondary schools it is important that a food education is supported by good food culture, to help pupils apply their knowledge, and therefore that school staff have the knowledge and skills to create that culture.

## Status of food education in schools

### How would you rate the status of food, cooking and nutrition in your school?

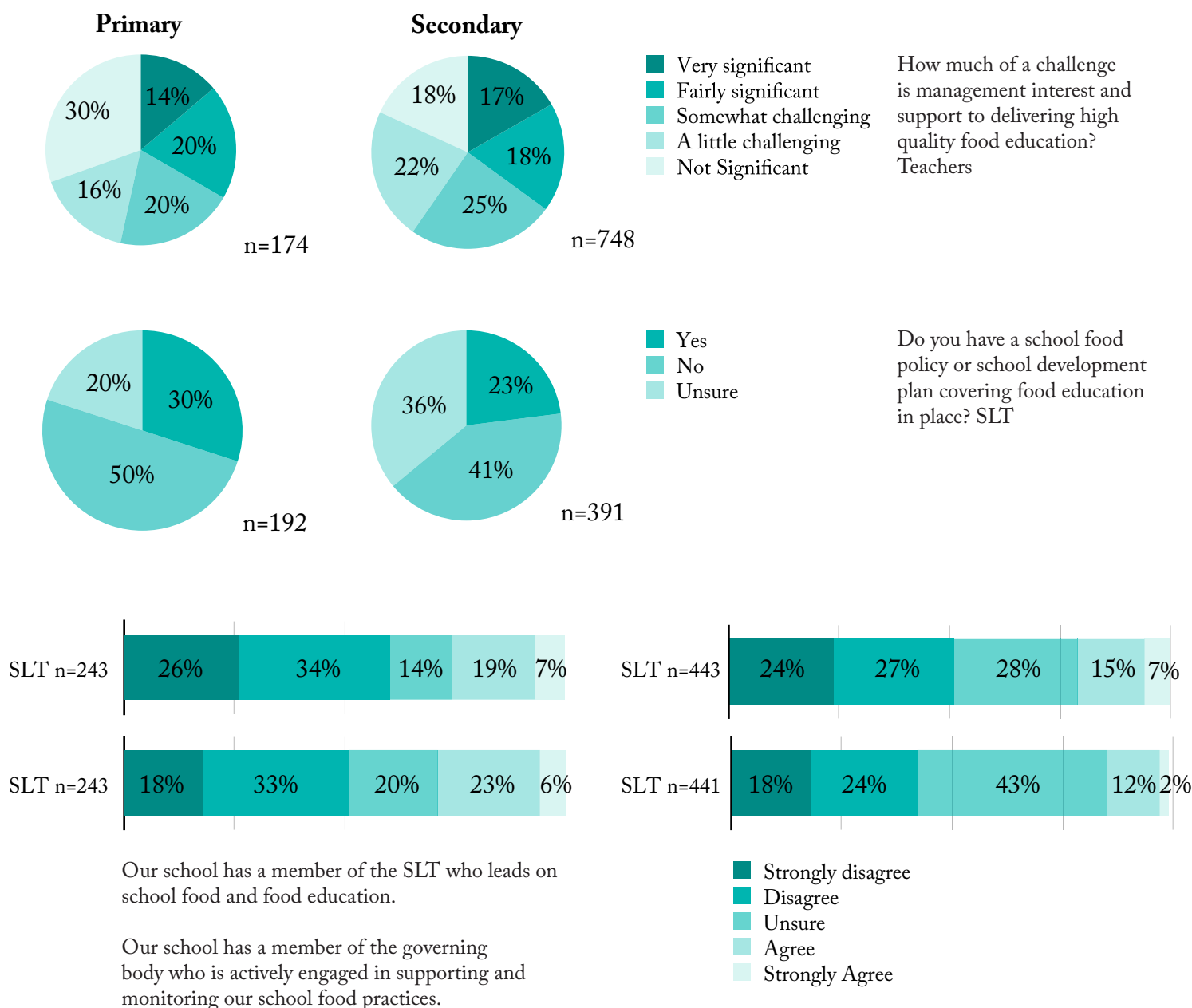


Food teachers and senior leaders alike discussed how the status of food education in schools is low. This has implications for the allocation of budget, time and resources, as well as how food education is supported across the broader formal and informal curriculum. Although we did see examples in primary schools where food and food education is clearly a priority. This lack of status sits uncomfortably against much higher parent and pupil aspirations for the subject.

Only 2 in 5 primary teachers felt the status of food education in their school was good or excellent and 1 in 3 felt it was poor. Only one out of 25 senior leaders in primary schools interviewed by Schoolzone considered food education to be of high importance, compared to other priorities in the school. Comments on this from senior leaders included:

- *'We do not have the staffing or the budget at the moment to focus on healthy eating, despite its importance'* (Senior leader)
- *'I feel that Healthy Schools (encompassing making healthy, informed choices etc.) is a key life skill for children and crucial to their well-being but unfortunately we are forced to put it behind academic considerations'* (Senior leader)
- *'The school is not seen as Good yet. Therefore the focus of the SDP is very much on the external indicators of progress and improvement.'* (Senior leader)

Only just over half of secondary food teachers thought the status of food, cooking and nutrition education in their school was excellent or good and around 1 in 5 thought it was poor. Many secondary teachers wished that food education had higher status in their school, for example saying that they would like it to have a *"higher profile and [be] valued as an integral part of the curriculum. [It is] Looked on as a lesser subject"*. They also reported that the low status is having a direct impact on the food and nutrition learning of their pupils *"pupils [are] constantly pulled out of lessons to do English and Maths. No catch up time is allocated because of the perception that English, Maths and Science are more important."* The lack of status is leading to disillusionment *"After retraining (from being a chef) as a food teacher, I have chosen to leave secondary education due to lack of respect for the subject."*



A third of teachers in primary and secondary schools noted that management interest and support was a significant challenge. Perhaps this is not surprising given low numbers of senior leaders reporting they had, or were aware of whole school food policies, or that there was a member of the senior leadership team (SLT) who leads on school food and food education. Food teachers also felt there was a low level of awareness amongst the SLT of the requirements of the food education curriculum. The picture was more positive at primary level, where we might expect there to be greater SLT oversight across the curriculum, half (51%) of teachers agreed that a member of the SLT was familiar with the new curriculum guidance. Only 1 in 4 (26%) secondary food teachers reported that their SLT was familiar with the new curriculum guidance.

There are also low levels of school governor engagement with food education and culture. Only 1 in 7 (14%) secondary leaders and 1 in 3 (29%) primary leaders reported that their school governing body is actively involved in supporting and managing their school food practices, indicating that food education and practices are not a priority for school governors either. Governors stated that food education and culture had either not been identified as priority and explained why. One governor we spoke to stated that “*food education was low on the priority list.*” She continued, “*However the priority would be higher if we know we are going to be checked up on it. Although we are aware of things that are mandatory, there are over 200 policies so a lot to get done. For food education to become higher on the agenda, the school needs to be chased up on it.*”

## 4.4 FINDINGS: CULTURE AND ENVIRONMENT

*'Secondary food teachers repeatedly bemoan the lack of connection between what they are teaching their pupils and the school environment'.*

### 4.4.1 Introduction

There is evidence<sup>49</sup> that for curriculum based food education to have maximum impact it needs to be embedded within wider school food culture. We found that food culture varies widely between schools, and particularly between primary and secondary schools. There were examples of a whole school approach to food and food education in the primary schools we visited, but none of the secondary schools had achieved this, and secondary

food teachers repeatedly bemoan the lack of connection between what they are teaching their pupils and the school environment. Our findings reveal issues around the messages and food practices pupils are exposed to; how food is used as part of fundraising, reward and celebration; and the nature of food provision within schools.

### Summary

**Although some schools adopt a whole school approach, in which food education in the curriculum is supported by a positive food culture and environment, this is not the norm.**

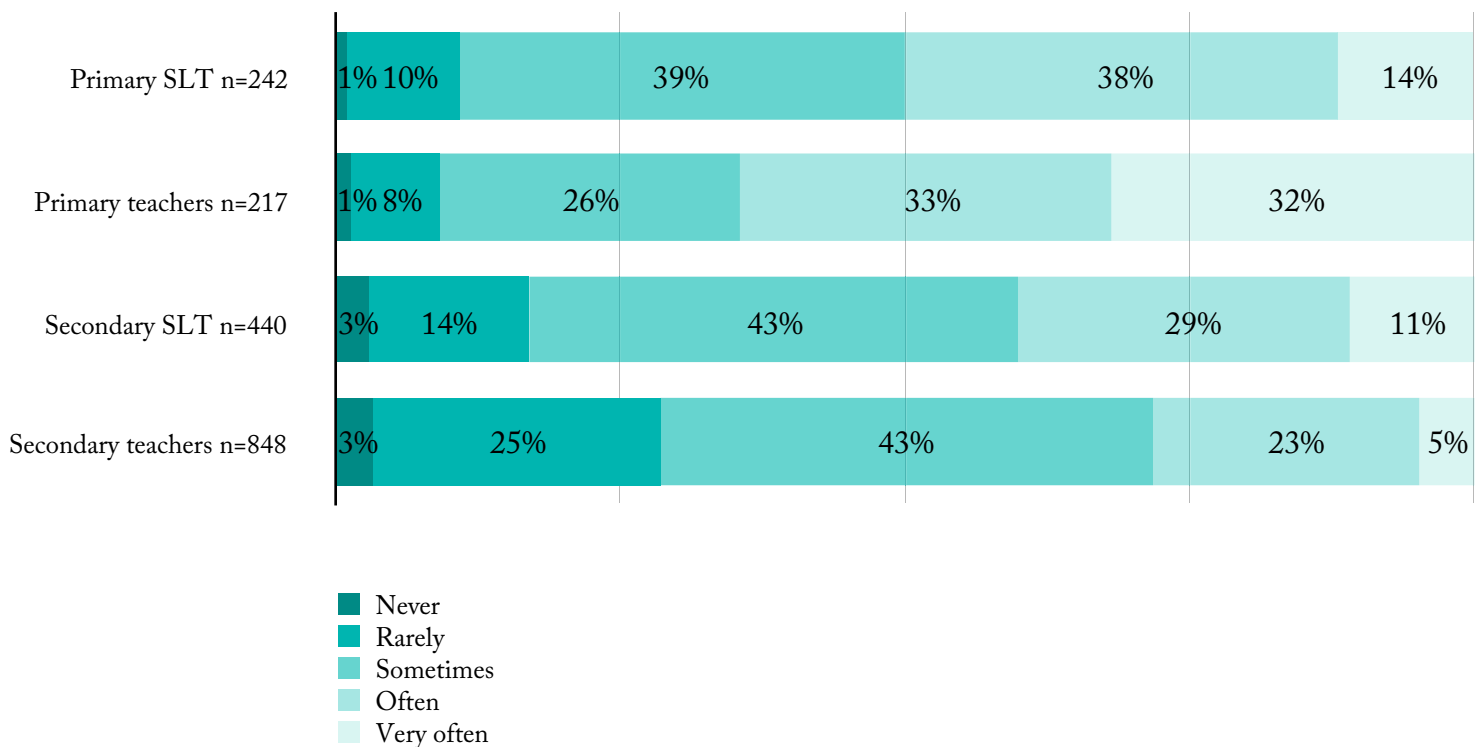
- Pupils are not being given the opportunity to activate their learning due to a lack of a whole school approach to food education.
- Food provision in many schools, particularly at secondary level, does not support healthy eating behaviours. There is frequent provision of foods high in salt, fat and sugars. These foods are priced more attractively than healthier foods and are available for breakfast, morning break and lunch. In secondary schools, healthier foods are described by pupils as being absent or at best having low visibility.
- There is often a lack of monitoring and enforcement of school food standards.
- Some food dining environments, particularly at secondary level, are noisy and unappealing. Pupils at secondary schools complained about long queues at break and lunch times that limited their free time and frequently resulted in them not being able to obtain the food they wanted to eat.
- Pupils in many primary and secondary schools report a lack of positive messaging and discourse about healthy eating and food choices across their wider school environments.
- The common practice of offering foods high in fat and sugars as part of rewards, celebrations and fundraising in primary and secondary schools contradicts pupils' food education and parental opinion.



#### 4.4.2 School food culture and ethos

1 in 5 (18%) primary senior leaders and over half (53%) of secondary senior leaders said that appropriate school ethos is a challenge to delivering high quality food teaching in their school. There were diverging views between teachers and senior leaders over the extent to which their school environment is consistent with a positive school food ethos, but low levels of consistency were reported overall, particularly in secondary schools. In some primary schools we visited, pupils and teachers described, and we observed, positive whole school approaches incorporating education and the physical and social environment.

#### How often is your school environment consistent with a positive whole school food ethos



#### 4.4.3 School food provision in secondary schools is often poor and not health-supporting

The food provision in a school can be a very real manifestation of that school's food culture. Whilst at primary schools there were some great examples of good food provision, in secondary schools the food environment, interactions with staff and food offer were often described as poor by pupils.

##### i) Setting

Senior leaders and pupils highlighted the school food environment as an issue of concern. Only 1 in 4 of the 25 primary school senior leaders interviewed thought there was enough time and space for school lunches, and noisy dining environments were reported to be an issue.

Secondary pupils described their dining halls as overwhelming and sometimes intimidating for both younger and older pupils. *"It's packed, it's literally all people, pushing and shoving, with the teachers they don't do anything they just stand there and let people in. It makes you feel like you are being bullied, because you are being pushed about."* (Year 10 boy). We observed, and pupils described, a lack of healthy eating prompts within dining areas, either in terms of visual displays or in terms of how food items were displayed.



**High fat and sugar foods placed next to tills in a secondary school.**

##### ii) People

Children and young people had had very different interactions with staff involved in their mealtimes. In one primary school, pupils described how these interactions made them feel positive about school food *"Having friendly encouraging cooks [supports children to make healthy choices], because if you don't have very nice cooks then you might go off school food a bit, and our school dinners are very healthy, but if you have a nice cook, you look forward to seeing them and eating the lunch."* In this school the chef was very visible and children reported seeing her every day and talking to her, and how she was sometimes involved in their food education. Parents were also regularly involved at lunchtime, serving food, clearing tables and helping children to eat their food. The experience is very different in secondary schools, for example pupils in one secondary school said of canteen staff *"I don't think they like us much, because there's only one or two that speak to you, the rest are like"* and mimed grumpily serving food. (Year 7 pupil).

Pupils in some primary schools also told us how teachers helped them to make healthy and balanced meal choices throughout the school week, including as part of the daily registration process. Secondary pupils described the difference between primary and secondary school *"I feel like primary school gives you more moderation, like one day they give you cake and the next they give you fruit... but in senior school it's all there but now you have to pick what you would like"* (Year 7 pupil). However, there was little appetite amongst secondary pupils to have their choices constrained.

##### iii) Service

###### a) The quality and balance of food provision

We saw good and exceptional examples of food provision at primary level, where high quality, varied and nutritionally balanced meals were offered. Pupils in other primary and secondary schools told us about less healthy meal provision as well as the contrast between primary and secondary food provision *"In primary I do think the menus weren't too unhealthy, it was more healthy but in secondary school it's more unhealthy than healthy."* (Year 7 pupil).

The research with pupils (including focus groups and observations of the school environment) revealed that at secondary level the food offer often presents a number of challenges to healthy eating practices.

These findings were supported by comments from many teachers and senior leaders. The specific challenges are:

- **The range of food on offer:** there were some healthier dishes or items available but also a large number of unhealthy/nutritionally imbalanced items ‘competing’ for the pupils’ pound at break and lunchtime, and at some schools at breakfast too. Around half (54%) of parents of children aged 11-15 were satisfied with the balance (including price) of healthy and unhealthy options available across the school day; nearly two in five (17%) were dissatisfied. It is however unclear how aware parents are of the nature and quality of school food as most pupils report not talking to their parents about their school food choice.
- **The option to buy stand-alone items:** it was possible (and common) for pupils to purchase single items high in salt, sugars and/or fat content, and without vegetables or protein etc. e.g. chips for £1, pasty for £1.80, sugary drink for £1.50, sausage rolls etc. This has led to demand for bigger sized products that enable pupils to ‘fill up’ and get ‘value for money’.
- **Product content:** Frequently on sale are products high in fat and/or sugars including drinks, cakes, cookies, doughnuts, and pizza. Pupils sometimes reported an absence of healthy items *“In school they don’t really have fruit and veg” (Year 7 pupil).*
- **Size of product – e.g. large muffins, cookies, portions of chips:** there did not appear to be a limit on the size of items sold e.g. cookies, croissants, muffins, chips.
- **Frequency of availability:** items e.g. sugary drinks, cakes, cookies etc. were available up to twice daily.
- **Presentation of food:** cabinets of sugary drinks were often one of the first or prominently displayed items in cafes/canteens. Sweet baked goods were often positioned at key touchpoints such as near the till or where cutlery was picked up and pupils regularly paused. These are the same marketing strategies as might be seen on the high street. Salad on the other hand was often harder to reach and positioned in places inconvenient to stop, nestled between other items set back on the main serving areas or in a separate place away from the main

queue. – *“As you go in the canteen, there is a huge sort of stand for unhealthy food like stuff that fills you up, but as you walk in a bit further there is a salad bar, and the salad bar is a quarter of the size*

***b) Access to drinking water is often felt to be limited or unappealing***

Pupils also reported low levels of hydration. Although schools have water fountains on site, pupils consistently raise concerns about their hygiene, the quality of the water *“It doesn’t taste that nice and it’s usually not cold” (Year 10 pupil)* and the challenge of being able to fill bottles from them. As a consequence, they are either going without or buying sugary drinks (although bottled water is generally available at a slightly lower price point). Some pupils also reported bringing in large bottles of water from home.

***c) Provision is recognised to contradict food education***

Many food teachers expressed their deep frustration that the food offered within their school is not consistent with their teaching *“As a teacher we have to do savoury products, healthy food and healthy eating – then into the canteen they go and there they will find drinks laden with sugar. Plus the fact that we have 2 ½ breaks, at non-lunchtimes and no place to sit and eat, mean children grab, go and eat standing up and never a real meal. The food served in our canteen is a disgrace, stop selling the sugar, huge biscuits and go back to a full meal. It makes a mockery of what we are trying to teach.” (Secondary teacher)*

***d) It is questionable whether government issued School Food Standards are being implemented and monitored***

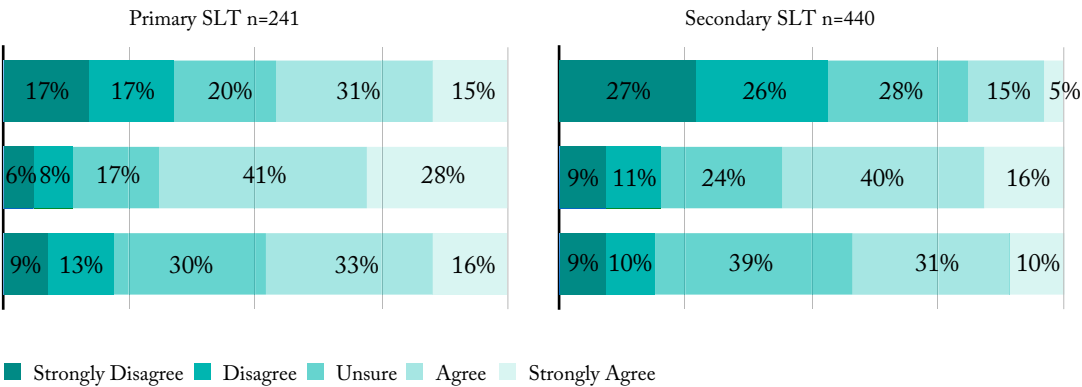
The deleterious nature of some food provision calls into question the adequacy of government-issued School Food Standards as a means of ensuring quality and health supporting action, particularly given the high levels of reporting amongst senior leaders that they work with caterers to meet food standards and monitor school compliance with School Food Standards.

Monitoring and compliance with School Food Standards

Our SLT takes regular steps to ensure that all adults working with children before, during and after school hours are aware of the SFS.

We actively work with our school caterers to ensure we meet SFS.

We monitor compliance with SFS on a regular basis



4.4.4 In some schools, pupils are rarely exposed to positive and frequently exposed to negative food messages throughout their school day

Food education stretches beyond the classroom to pupils’ experiences throughout the school day. The messages and cues they are exposed to impact on their *capability* (do they have the capacity to live and eat well?), *opportunities* (is their physical and social environment health-promoting?), *motivation* (does interaction with others shape their values and aspirations?) and behaviours (what they ultimately choose to do). We found that food and nutrition messages and practices are sometimes well integrated as part of a whole school approach to food, but in other cases, particularly in secondary schools, are entirely lacking, inconsistent or poorly executed.

i) A lack of visual cues

In some primary schools, good use was made of visual displays about food and healthy eating within the classroom and school dining area. In other schools, displays only touched on rules about eating behaviour. At secondary level, most pupils reported there were few, if any, posters and information about healthy eating beyond their food technology classroom, although they did report frequent adverts for cake sales as part of fundraising.

ii) Staff rarely eat with pupils or talk about food

A focal part of the school day is lunchtime, this is an opportunity for school staff to support and guide the choices of pupils, both in the foods they eat and the social and cultural aspects of eating as one senior leader said ‘Eating food is a time we sit and share together’. Despite this recognition,

senior leaders reported that staff eat with pupils in only about a third of primary schools and around half of secondary schools. We saw this in some of the schools we visited, however, secondary pupils reported that staff never spoke to them about their food choices.

In secondary schools, many pupils were unable to recall points in their school day, for example during form time or assemblies, where there had been discussion of food and nutrition. Where they exist they are not always delivered in a way that engages pupils. One pupil said of form-time activities in Healthy Eating Week “It was such a random week to have, we never normally have it. Because it was only in that morning that you ever really thought about it... and once that morning’s over you don’t really ever think about it.” (Year 10 pupil).



Primary pupil drawing.

iii) Staff demonstrate positive and negative food behaviours

Primary and secondary pupils reported both positive and negative modelling of food behaviours. Some described how they see teachers making use of the salad bar, or that there was healthy food in the staff



room, but others stated that teacher behaviours make it harder for them to make healthier choices and asked for teachers “*not to eat unhealthy things in front of me*”(Year 2 pupil). This pupil noted that teachers on duty at break often have biscuits or chocolate with a hot drink in the playground, and others talked about teachers eating sweets in class or at break times.

#### iv) Food policies, where they exist, are rarely monitored

Although most primary schools we visited had packed lunch policies in place, the extent to which these were monitored varied greatly. Pupils described a sense of injustice about this, partly because of the challenge of being presented with a healthy school dinner whilst packed lunch pupils were able to ‘get away with’ eating banned goods like chocolate, and

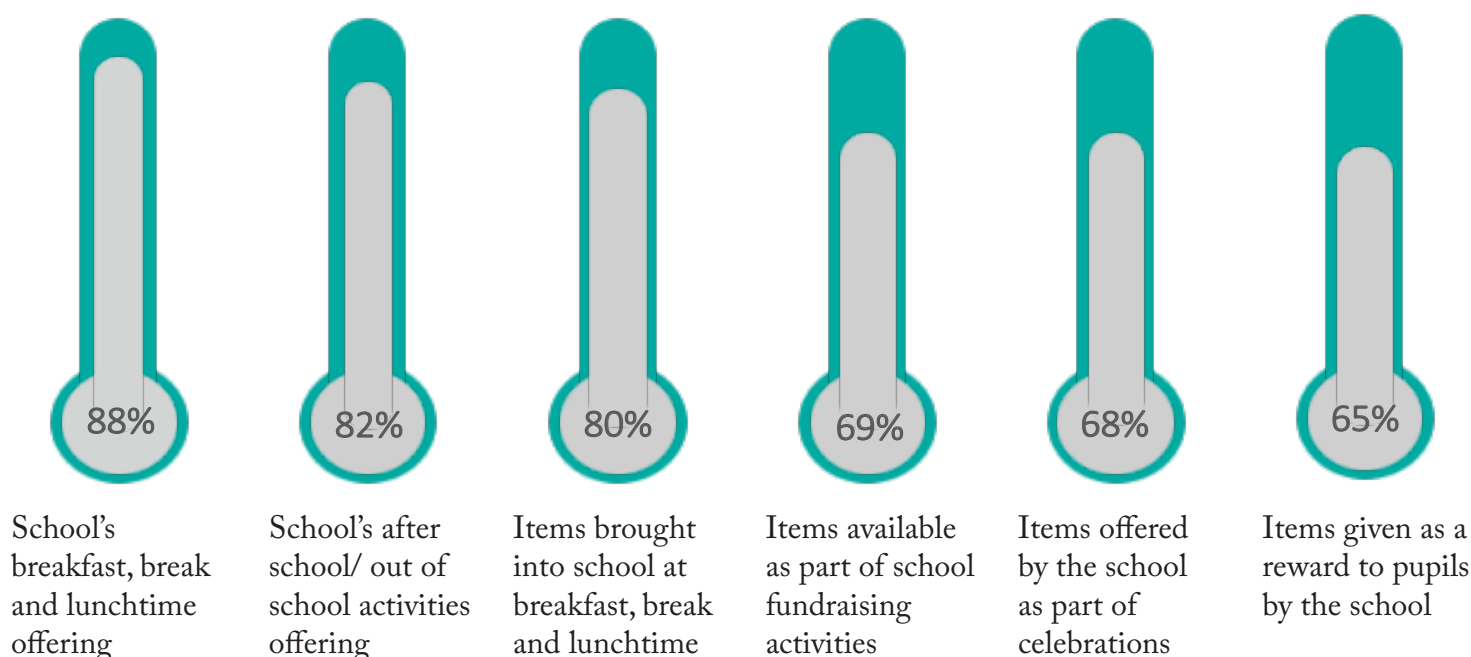
partly because they felt it unjust that children should be exposed to unhealthy foods in their lunchbox “*Maybe they should just start educating parents about what to put in children’s lunch boxes and what not to put in there, because it’s not fair to send a child with a cold Big Mac and chips for their lunch.*” (Year 6 pupil).

Most secondary pupils reported that there were no food policies in place in their school, although some said there were restrictions on bringing in energy and sugary, fizzy drinks, but said this was rarely monitored. Parents believe that school food policies that address the quality, variety and balance of food available across the school day are of high importance, and are keen to work with schools to develop them.

## PARENTAL OPINION ON DIFFERENT ASPECTS OF SCHOOL FOOD POLICIES

In your opinion, how important or unimportant is it that your child’s school has a healthy school policy that covers food and drink...?( n=573)

### Importance of different areas covered in school’s food and drink policy % Very/Fairly important



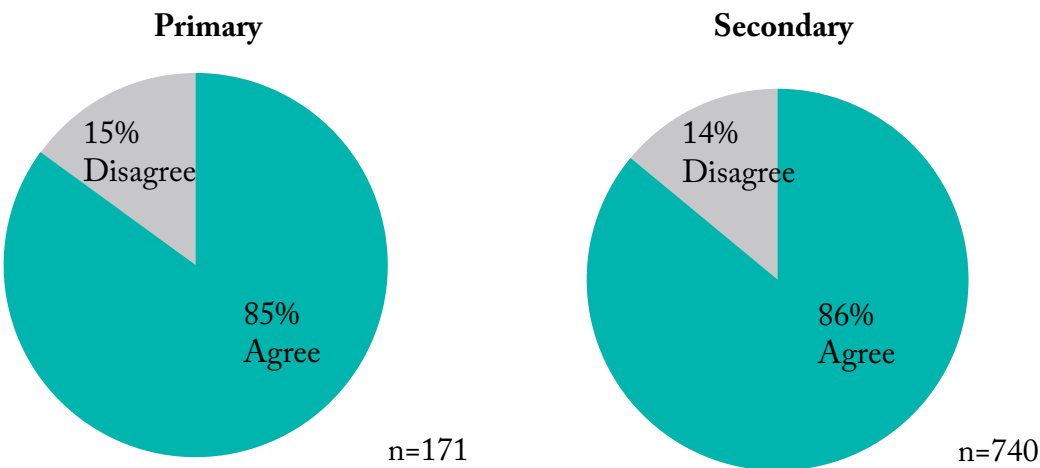
4.4.5 The culture of fundraising, reward and celebration is one that frequently involves foods high in salt, sugar and fat, and contradicts pupil learning and parent expectations

Senior leaders, teachers, pupils and parents in primary and secondary schools reported the widespread and frequent provision of foods high in salt, fat or sugar as part of rewards, fundraising and celebration in schools.

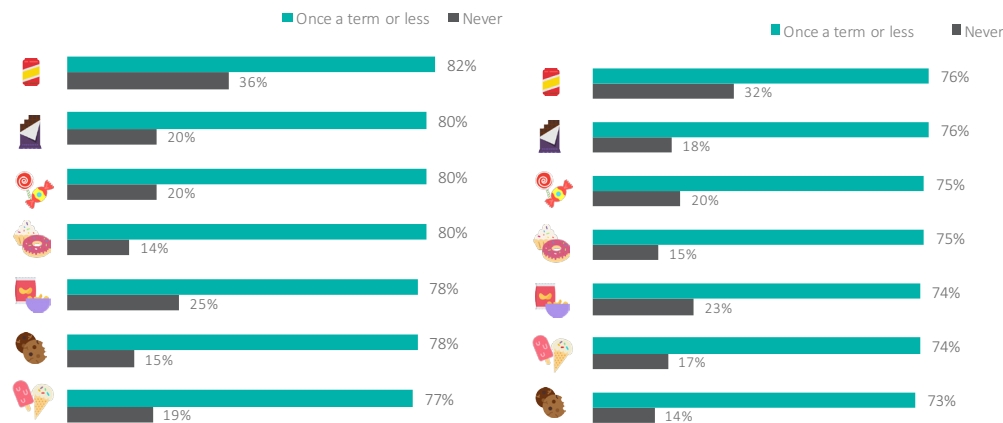
There is a mismatch between what parents think about how often foods high in salt fat and sugar should be available as part of reward, fundraising and celebration activities, and the extent to which they are currently provided. Most parents say that such foods should not be offered more than once a

term. Some teachers highlighted the inconsistency between healthy eating messages and their school practices on rewards, fundraising and celebration, and said that one of the best things their school could do to support their pupils in making healthy food choices would be to “end the reflex of cake and bake sales for rewards and fundraising” (Secondary SLT).

Foods high in salt, fat and sugar as part of fundraising



Teachers reporting their school fundraising activities include biscuits, buns, cakes or sweet items



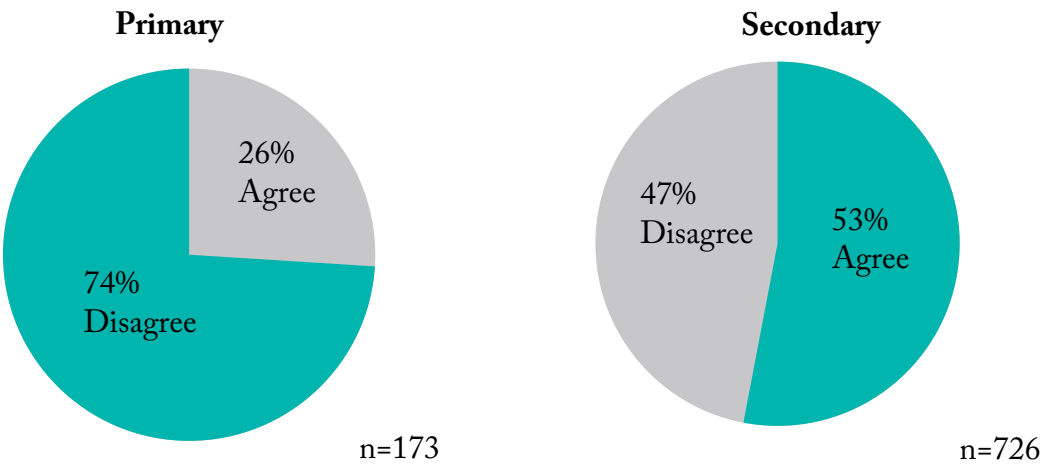
Parental opinion on how often foods high in salt, sugar and fat should be offered as part of fundraising activities in school n=573

i) Reward and celebration

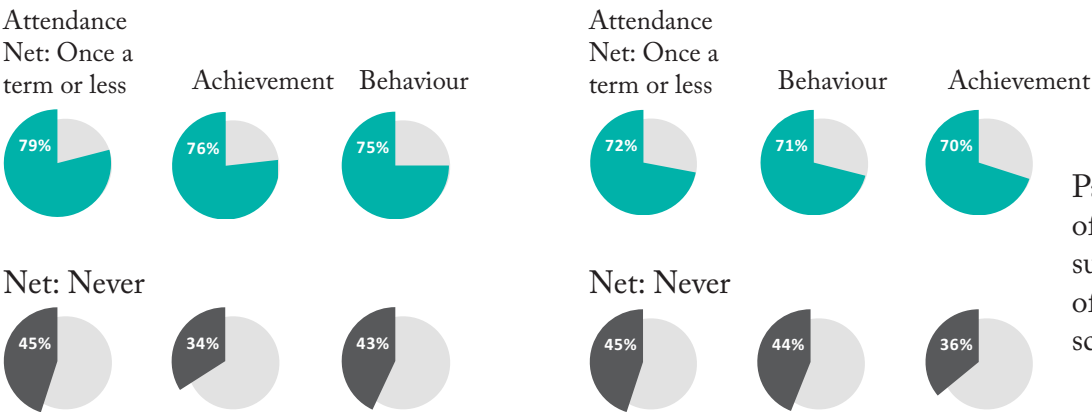
Around a quarter of primary SLT and teachers said that their school rewards include biscuits, buns, cakes or sweet items. This rose to about half of secondary SLT and teachers. Primary and secondary pupils gave us frequent examples of this. In one secondary school they told us that whole forms would be rewarded with doughnuts if they achieved 100% attendance in a month. School staff are aware that their reward and celebration practices contradict healthy eating practices “We’ve been known to provide

KFC/Domino’s pizza as an incentive for weekend revision sessions, obviously seen as a treat but cannot do the children’s attitude towards food any favours.” However this practice is seen as relatively benign, “Teachers are generally aware that it is not seen as a healthy practice, but most also see that the use of treats is acceptable, for example at Christmas, for pupils’ birthdays and so on.” Some schools actively address this issue through the provision of healthy foods at celebrations.

Foods high in salt, fat and sugar as part of school rewards



Teachers reporting their school rewards include biscuits, buns, cakes or sweet items.



Parental opinion on how often foods high in salt, sugar and fat should be offered as a reward in school n=573

## ii) Fundraising

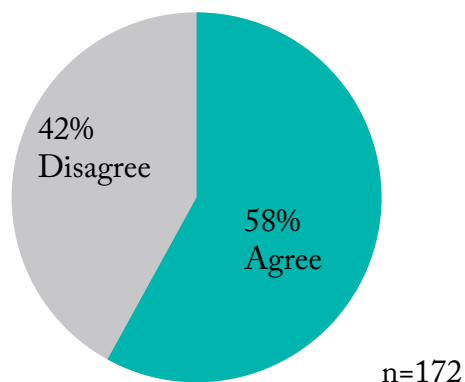
85% of primary and 86% of secondary school food teachers reported that fundraising at their school included the sale of biscuits, buns, cakes or sweet items. Senior leaders were also aware of this as a challenge *“PTA event asks for donations are primarily cake, wine and chocolates” (Senior leader).*

Pupils described how fundraising events they had organised involved cakes and sweets *“We had loads of stalls in the hall, we had cupcakes and sweets” (Year 7 pupil).* Secondary pupils reported how posters for bake sales were displayed across their school *“It’s advertised around the school, posters and stuff, and that definitely makes you want to go and buy one, they’re always up, and they’re mentioned in assemblies and form time.” (Year 10 pupil)*

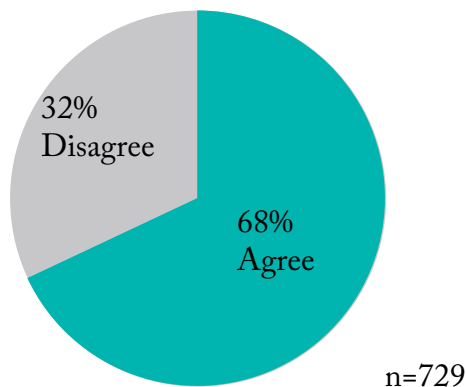
Senior leaders sometimes questioned the wisdom of pupils’ purchasing choices during fundraising events, *“Children know what the healthier choice is, but do not always make it. This is demonstrated by the number of cakes they buy at cake sales – when it would be prudent to have just one or two small ones they just buy as many as they can.” (Senior leader).* Pupils were articulate in explaining their rationale, *“You’re encouraged to buy sweets because it’s for charity...I felt encouraged to buy it, because it’s for charity and it’s cheaper” (Year 7 pupil).* Another child talked about how the school’s financial needs were encouraging pupils to eat sweet foods at fundraising events *“In my old primary school they did a chocolate tombola... every kid would go 3 or 4 times. The school say they want their children to be healthy, but they want the money from that, like there’s two sides to it.” (Year 7 pupil).*

## Foods high in salt, fat and sugar as part of school celebrations

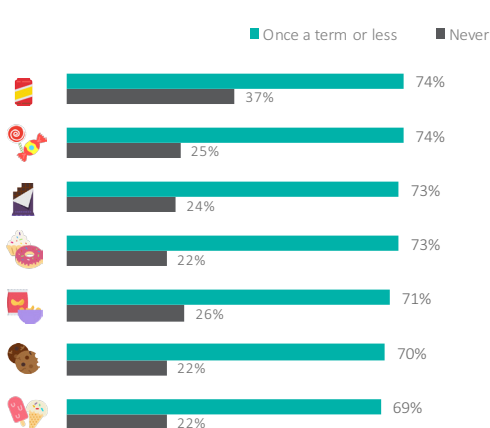
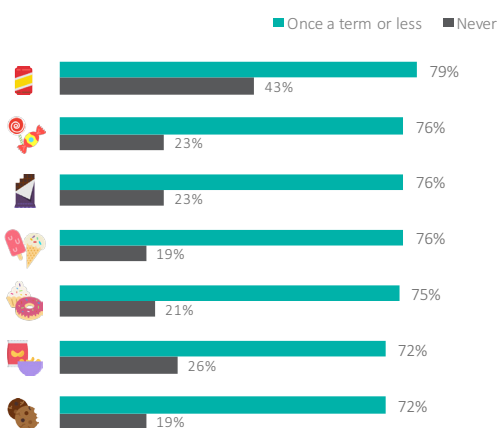
Primary



Secondary



Teachers reporting their school celebrations include biscuits, buns, cakes or sweet items



Parental opinion on how often foods high in salt, sugar and fat should be offered as part of school celebrations = n=573



## 4.5 FINDINGS: CHOICES

*'Pupils in many schools, particularly secondary schools, find it difficult to make healthy choices, due to poor school food environments.'*

### 4.5.1 Introduction

We talked to young people about the things in their school that helped or hindered them to make healthy food and drink choices. We have particular concerns about what secondary school pupils told us about the impact of their school food environment on their food choices during the school day.

Essentially, they said that in most cases it was so

poor that they were prevented from living out what they had learnt about a healthy diet in their food technology lessons. The findings described below are all focused on secondary schools unless stated otherwise.

#### Summary

**Pupils in many schools, particularly secondary schools, are finding it difficult to live out their food education learning due to poor school food environments. They described the choices they make and the influences on their decision-making.**

- Secondary pupils frequently reported choosing to purchase and eat foods high in sugar, salt and fat which are offered through school catering facilities at multiple points during the school day.
- Primary and secondary pupils described strong social and cultural influences on what, where and how they wanted to eat. For example, in secondary schools, they favoured take away food in throwaway packaging that could be consumed outside of the canteen. Rarely are whole balanced meals offered in this format.
- Secondary pupils also reported strong economic influences, particularly regarding the favourable pricing of less healthy food and drink items over more healthy items.
- Pupils described how frequent fundraising activities in primary and secondary school encouraged them to purchase and eat foods high in sugar, salt and fat.

#### 4.5.2 Pupils are exposed to multiple cues throughout the school day that encourage the purchase of unhealthy items

Many pupils mentioned being in various points across their school site and smelling unhealthy foods, such as paninis and pizzas, being prepared at break and lunchtime in the main canteen and other snack bars. The allure of this smell is strong *“I love the smell of food, because I was outside and I could smell it, it makes you want to eat more, if you smell a panini you are just like ‘oh I want to eat a panini’.”* (Year 7 pupil). Pupils also talked about the absence of the smell of healthy foods as a cue to buy them *“With fruits and that it doesn’t really smell and you don’t know it’s there at break or lunch”* (Year 7 pupil).

Pupils described the visual cue of seeing unhealthy foods, both pupils walking around school with them and in the food purchasing locations, and the lack of visual cues for healthy foods. Some also described how healthier options did not look fresh or appealing *“The salads had been left out there for ages, and there was no things covering them so they had been left out in the open... for breaks and lunches”* (Year 10 pupil).

Pupils frequently talked about seeing large queues on the approach to the snack bar or canteen, and once inside the canteen. Depending on the size of the queue they might choose not to buy food, at that point, or at any point that day *“If it’s really long you will spend most of your lunch queuing up, you might not want to do that.”* (Year 10 pupil). Many pupils reported that they went without food whilst at school and that this made them ‘hangry’ (hungry and angry) and had an impact on their learning and mood *“not concentrating”, “moaning cos you’re hungry”* or *“you’re just in a bad mood and you take it out on other people”* (Year 10 pupils).

#### 4.5.3 Pupils think about a number of factors when buying and consuming food and drink in school

Pupils reported weighing up a number of factors when making their food choices including: hunger levels; price and value for money; and social influences.

##### i) Hunger

Pupils reported being hungry throughout the day, and thinking about food a lot in the periods before

break and lunch. They wanted to be able to buy food across the school day that would satisfy their hunger. As described earlier in the curriculum section, nutrition is a consideration, but the lack of knowledge about which foods would be best at satisfying hunger and providing nutrition at the same time is a barrier to choosing appropriate foods.

##### ii) Price and value for money

Price is a key issue for pupils. They described how *“the unhealthy foods are generally a lot cheaper”* than healthy foods, for example 80p for fruit and 70p for a piece of cake. One pupil described how her daily spend limit was set to £3 which limited her food choices *“I want cheaper food, because sometimes you want more than one bit of food, but you can’t get it because of your allowance, and if you want a drink and a certain type of food, for example a wrap... because my allowance is £3 there are certain foods I can’t get.”* (Year 7 pupil). We did not systematically assess pupil average spend but limited evidence suggests that secondary pupils are often spending up to £5 across the school day. This creates economic insecurity for pupils eligible for means-tested free school meals.

Pupils also talked about value for money. They want to buy foods that are ‘fresh’ and going to fill them up. They described weighing up options like small pots of grapes, that may well have gone off, at 40p with cakes at 80p – more expensive but less risky and more filling, and therefore perceived as better value for money.

##### iii) Social influences

###### a) Socialising and portability

The desire to be able to socialise with friends leads pupils to seek out portable foods. Some pupils reported a stigma attached to foods requiring a plate *“At primary school everyone has plates, and because at work if you go out for lunch most people don’t sit in, so I think it’s [using a plate] seen as being more babyish, back to primary school, so people kind of grab things”* (Year 10 pupil). Pupils want to be outside of the school hall, and outside school buildings generally. They therefore seek the foods they can eat easily on the move, rarely are portable healthy foods available. We saw different practices in primary schools where free fruit was provided – in most schools pupils were able to eat this on the move at break, but in one school they had to remain in the dining hall and pupils reported this stopped them from eating the fruit

*“They don’t want to be stuck in there and that puts them off eating it”*. In secondary school, those portable foods which pupils perceived to be marginally healthier e.g. a wrap over a panini, are consistently more expensive.

#### ***b) Peer influences***

Pupils also talked about their desire to fit in with their friends, and how they would make their food choices based on what they were buying or what was visibly popular that day. *“They wanna be like someone else, say you’ve got a group of friends...say you are trying to fit in, and you’re not like others, you want to fit in”* (Year 10 pupil). Eating foods that would support particular body images was also said to be a factor for some in food choice *“to lose weight if you are a bit bigger than other people, but they suspect that you have to look like supposedly normal people.”* (Year 10 pupil).

#### ***c) School staff influences***

Relationships and interactions with school staff are potentially important in shaping pupil food knowledge and behaviours and there is some evidence that positive practices are happening and having a beneficial impact in primary schools. However, as previously discussed, pupils reported an absence of discussion with non-food teachers about food choices. Some senior leaders said that there is a nervousness about discussing these issues due to sensitivities about body image, obesity and eating disorders. Some secondary teachers suggested food education should also be included in PSHE lessons.

#### ***d) Parental and family influences***

Although in many cases pupils reported that their parents were able to review their food purchases online, few said that they ever discuss their school food purchases and consumption with their parents. 1 in 4 (24%) primary leaders and half (52%) of secondary senior leaders said that adequate parent interest and support is a challenge to delivering high quality food education. In contrast to this, pupils talked about different, healthier eating patterns at home to school *“Like here, they have cakes for lunch and all, at home I’ll just have an apple as a little snack”* (Year 7 pupil). Many pupils talked about a range of foods they cooked with their parents and other family members, indicating that there are positive food behaviours in the home.

## 4.6 DISCUSSION

*'If we want to enable pupils to adopt healthy food behaviours we have choices of our own to make about how we develop young people's capabilities, opportunities and motivation. This section reflects on each of these areas in the context of our findings.'*

Returning to the COM-B behavioural change model<sup>50</sup>, this Discussion section considers how food education and culture is impacting on pupils' *capability*, the *opportunities* they have and their *motivation*, and therefore their behaviours.

#### 4.6.1 Supporting the development of pupil capability

Pupil capability\* is formed through the interaction of resources, social, economic and environmental contexts and pupils' knowledge, skills and dispositions.

- There is some great work being done in food education, but more needs to be done because there is a worrying lack of consistency in food education provision at both primary and secondary level.
- There are some important gaps in food education at primary level, where many children have few opportunities to develop practical skills for food cooking and preparation. Some primary children are also lacking in basic healthy eating and nutrition knowledge.
- There is an apparent need for a greater depth of education on healthy eating and nutrition e.g. through a 'spiral' curriculum across Key Stages 1-4 (e.g. like that outlined in the British Nutrition Foundation Core Competencies Framework<sup>51</sup>), not just repetition of the Eatwell Guide ad infinitum.
- Current food education provision (inside the food classroom and beyond) does not adequately give children the skills they need to apply their learning, particularly when they are making food choices in what are potentially hostile food environments.
- Many food teachers report being under-supported and under-resourced. Many do not have the time, budget and facilities to be able to deliver the existing or an enhanced curriculum. Nor is the wider school environment consistent with their teaching. It is unreasonable to expect food teachers to deliver behaviour change in isolation.

#### 4.6.2 Giving children and young people the opportunity to make healthy choices

Having the right social, economic, interpersonal and physical environmental factors in place is key to giving young people the opportunity to live out their learning. Many of the issues discussed below are particularly pertinent for secondary schools, but can also apply in some primary schools.

- The physical school environment, particularly at secondary level, is in many cases not supportive of food education learning outcomes, nor conducive to healthy eating behaviours. There is an absence of positive food messages across the school site, including in dining halls. This does not create opportunities for pupils to reflect on healthy choices.
- The prevalence of food provision that is high in fat, sugars and salt compared to more healthy foods is highly problematic, as is the way foods are displayed. Children often have to wade through a selection of less healthy foods to seek out healthy ones. At the same time, they are grappling with price incentives to purchase less healthy options.
- Queuing, noise and 'manic' dining spaces do not encourage children to sit down and eat a 'meal' together. In this context, if socialising and the portability of foods is important to pupils, perhaps there is an imperative for caterers to offer them healthy, portable foods, priced appropriately.
- The culture of high fat and sugary foods used as rewards, in fundraising and in celebrations, is creating social and physical environments that contradict children's food education. This appears to be recognised by pupils and school staff, and there is an appetite from parents for the use of such foods in this way to be limited to once a term.
- Children are exposed to, and comment on, conflicting messages about food choices when they see teachers eating biscuits and sweets at break time but are told to eat healthy snacks. There is therefore room for more positive modelling of food behaviours by school staff.
- Creating good food environments that give young people opportunities to make healthy choices requires a whole school approach. Leadership teams are not currently as engaged with food education as they could (and we would argue should) be.

\* For more detailed comment on the crucial role of capabilities see Sen, A.K. (1999) *Development as Freedom* (Oxford, Oxford University Press).

- The reported lack of conversations between young people and their families about their food choices suggests that some opportunities for promoting healthy food behaviours are being missed. However, parents were clear that they wished to work with schools to develop policies and guidance on food within the school day and the principles of a healthy diet for children and families, which indicates there is the desire to create more opportunities here.

#### **4.6.3 Nurturing children and young people's values and aspirations, and developing the motivation to make healthy choices.**

Children and young people's motivation is shaped by their personally held values and aspirations. In order to support healthy behaviours, we need to understand pupils' existing values and aspirations and consider how our food education and culture speak to them. We also need to think about how we can work with pupils so that healthy food choices become more a part of their intrinsic motivation and identity.

- Many, although not all, pupils said that eating healthily was important to them as they cared about their immediate health and well-being. For some this was about being fit enough to play sports, for others it is about matching their desired body image. Other pupils talked about it being important to them for their long-term health. For some pupils, healthy eating simply wasn't a priority.
- Many pupils had aspirations to be able to prepare a range of healthy meals now and in the future. Some discussed the desire to be able to be independent in adulthood, others the importance of being able to manage on a budget – financial security matters to them.
- Pupils' social values are important to them and shape their food choices. In many secondary contexts, the interaction of these values and the poor environment is leading to less healthy food choices.
- There is a gap in current food education delivery, within and beyond food lessons, in exploring and developing pupil values and aspirations.



## 5. RECOMMENDATIONS

*'Schools should be 'healthy zones' where pupil health and wellbeing is consistently and actively promoted through the policies and actions of the whole school community.'*

We spent considerable time reflecting on the findings of our review and speaking to stakeholders about their implications. Based on the data and our understanding of the current food education policy and practice context, we have developed a set of recommendations. In drafting these, we have sought to build on where things are working well, whilst addressing the gaps and challenges our research identified.

We have four key recommendations:

- **Schools should be 'healthy zones'** where pupil health and wellbeing is consistently and actively promoted through the policies and actions of the whole school community.
- **We must support the knowledge and skills development of the whole school workforce** to enable high quality food education delivery supported by a positive whole school approach to food.

- **Schools should be provided with the resources** to facilitate delivery of better, more consistent food education.
- **Reporting and evaluation** of food education, school food culture and school food provision should be mandatory.

In the following pages, we set out the rationale for each of these recommendations, and describe in more detail how they could be implemented.

## 5.1 ENSURE SCHOOLS ARE HEALTHY ZONES

### Summary

Schools should be ‘healthy zones’ where pupil health and wellbeing is consistently and actively promoted through the policies and actions of the whole school community:

- Government should make School Food Standards mandatory in all schools and cover all food consumed when at school.
- DfE and the National Governors Association should jointly re-issue guidance for governors on their responsibilities for school food, and consider placing a ‘health and wellbeing’ statutory duty of care onto governors.
- An expert group should come together to work up specific guidance for secondary schools in developing a positive school food ethos and culture.



It comes as no surprise that our surveys and findings reiterated the importance of schools having a healthy environment. A previous major survey of 400 headteachers commissioned by DfE in 2013 (as part of the School Food Plan review)<sup>52</sup> showed how important headteachers believed a positive healthy food environment was in their schools.

The School Food Plan reinvigorated the concept of ensuring ‘a whole school approach’<sup>53</sup> to school food – that if you wanted to increase the take-up of good school food, you needed to embed a positive food culture, ethos and environment. For example, more than 1,000 schools have achieved a Food for Life school award for their whole school approach to food, with proven positive impact on healthy eating and behaviours.

Multiple recent reports, including from the likes of the British Medical Association, have also stressed the importance of ensuring a healthy wider school environment, “*The use of a whole-school approach – where curricula-based learning is supported by the wider school environment and engagement with parents/families and the community – is a useful approach for supporting healthy dietary behaviours in schools.*”<sup>54</sup>

But what is perhaps most startling from our research is that pupils themselves were keen to point out that the school environment can impede their abilities to realise and apply their acquired knowledge and skills of healthy eating and active lifestyles. What is the point, they said, of understanding the principles of a healthy diet if their school environment hampers them from living it out.

Of course, much has happened over the last few years, both as part of the School Food Plan and more recently with the planned interventions in the Child Obesity Plan, such as the intention to revise the School Food Standards and to introduce a new Healthy Rating Scheme for Schools.<sup>55</sup>

But our findings show that more can and needs to be done to make schools ‘healthy zones’, i.e. health supporting physical and social environments. In addition to updating School Food Standards in light of refreshed government dietary recommendations<sup>56</sup> further mandatory monitoring and reporting measures are needed. (These are discussed further in this section under ‘Report and evaluate’).

### **5.1.1 Ensure school food standards apply to all school children and all school food**

An estimated 2.38 million<sup>57</sup> English school children are not covered by the School Food Standards. There are persistent anomalies in the system – not only the highly publicised 3,896 schools in the ‘academies gap’<sup>58</sup> that has been the focus of the ‘Save our Standards’ campaign<sup>59</sup> but also that further education colleges and independent schools are also exempt. The Health Select Committee<sup>60</sup> and others have been equally clear that the School Food Standards must be universally applied.

We call on Government to make the School Food Standards universally applicable. Running yet another schools campaign targeted at ‘in the gap academies’ will not suffice.<sup>61</sup>

Whilst the current set of School Food Standards apply across the school day, they don’t cover food brought in – this includes all packed lunches and any other snacks purchased en route to school. A 2010 study showed that only 1% of school packed lunches meet nutritional dietary requirements,<sup>62</sup> and a 2016 refreshed report by the same academics showed only a fraction of improvement to 1.6%.<sup>63</sup>

Tackling a poor packed lunch culture in schools can be a daunting task for schools, without the backup of wider policy mandate. One food teacher from a secondary school in Kent wrote to the Jamie Oliver Food Foundation copying an angry parent Facebook thread with other parents, belittling the heads’ decision to ban unhealthy foods from packed lunches. And the media still cries out with nanny-state schools banning sweets or treats in schools, or sifting through packed lunches tossing out the crisps, fizzy drinks and chocolate bars.<sup>64</sup>

The official School Food Regulations gives a long list when Standards *don't* apply in schools:

- a) at parties or celebrations to mark religious or cultural occasions;
- b) at occasional fundraising events;
- c) as rewards for achievement, good behaviour or effort;
- d) for use in teaching food preparation and cookery skills, provided that any food prepared is not served to pupils as part of a school lunch;
- e) on an occasional basis by parents or pupils;
- f) by maintained boarding schools who are allowed to provide cakes, biscuits, confectionery and snacks as part of an evening meal before 6pm.<sup>65</sup>

It is clear from our teachers and parents surveys that school rewards, fundraising and celebration practices currently are, and should no longer, act in contradiction to food education. Parents believe policies and guidance that address this are important and are keen to work with schools to develop them. They also felt guidance on a healthy diet for children and families to be important.

Finally, any out of school hour provision (pre-school on-site breakfast clubs, pre and after school clubs, holiday and community provision) must also be covered by school healthy standards.

#### **Proposed action:**

**Government to change legislation to ensure that the School Food Standards are universally applied to all English schools. The standards should also cover all food consumed in school.**

#### **5.1.2 Make sure school food policies are in place and working in schools**

In January 2015, DfE published guidance setting out how it expected school governing bodies to ensure that the national School Food Standards were met.<sup>66</sup> The guidance stated; *“The governing body should ensure that it receives regular reports on compliance with the school food standards as well as take-up of school lunches and financial aspects of school food provision. Governing bodies are strongly encouraged to work with the senior leadership team to develop a whole school food policy; setting out the school’s approach to its provision of food, food education (including practical cooking), the role of the catering team as part of the wider school team and the school’s strategy to increase the take-up of school lunches.”*

The National Governors Association published additional ‘how to’ guidance in partnership with the School Food Plan.<sup>67</sup> But when we talked to some governors,<sup>68</sup> it was not evident that governors were yet fully aware of their formal statutory responsibilities for school food, or were giving it full priority, and less than a third of primary and only 14% of secondary senior leaders said that their school governing body was engaged in supporting and monitoring their school food practices.

Our findings also show a marked difference between apparent compliance with the School Food Standards between primary and secondary schools. We strongly recommend that any reminder of schools’ obligations is especially targeted at secondary schools.

#### **Proposed actions:**

**DfE and the National Governors Association should jointly re-issue guidance for governors on their responsibilities for school food, in light of the new Healthy Rating Scheme for schools and revised food standards.**

**DfE to consider placing a ‘health and wellbeing’ statutory duty of care for governors that ensures that schools demonstrate their food, nutritional and physical exercise policies and practices are not detrimental to pupil health.**

### 5.1.3 Encourage all schools to adopt a whole school approach which encompasses healthy school food provision, ethos and culture

Our research shows that primary school lunch environments often provide positive experiences. Many primary school food caterers also support schools by providing resource and support for wider food education activities. Caterers have helped build school gardens, run food enterprise initiatives, and hold national cooking competitions for young chefs of the year. Some caterers have Food Ambassadors whose job is solely to work with driving school meal uptake by ensuring a positive dining experience.

However, it seems an increasing number of primary school caterers now offer repetitive options, (as a prelude for choice,) but with a risk that a young child, not properly supported, could choose the same jacket potato with cheese every day for lunch.<sup>69</sup> Many school caterers now also provide a packed-lunch option. Close scrutiny is required to ensure that these changes in provision meet the nutritional framework on which the school food standards are based.

When asked how they can create a more healthy school lunch environment one caterer told us; *“This is ongoing, and we work on a school by school basis. Ideally what works best is when you sit the customer down at round tables. Water on the table. Salad bars placed in a prominent position. And a pleasant decor. Not easy as most dining halls are multi-use. But not impossible.”* She finished the interview by saying: *“Never underestimate the customer – in this case children. They are very open to try things when given facts. Their taste buds are evolving, sometimes daily. They are now taught*

*to always ask ‘Why?’ Give them information and make sure they are at the heart of what you offer.”*

We found a stark difference in secondary schools – they often have snacking zones, where unhealthy foods are purchased at different times of the day. Whilst ‘grab and go’ and ‘street food’ dining concepts are gaining popularity in schools, our pupil research showed that they don’t always (or are not able to) choose healthy options. This is backed up by a Royal Society for Public Health Children’s Obesity Report (written by children themselves) stating that 1 in 4 children reported they were unable to get a healthy meal at school.<sup>70</sup> Research carried out by the Children’s Food Trust in 2016 showed that nearly half of children (45%) said that eating more fruit and vegetables was the thing they would like to do to make their diet healthier, with four out of ten (40%) saying that they would like to drink more water.<sup>71</sup>

Parents also told us that they wanted more engagement with schools, so they could work together to develop clear guidance on pupil’s diet and nutrition. More help and guidance should be given to schools on how to work with parents in this area.

#### Proposed action:

**DfE and PHE should invite LACA (the Lead Association for Catering in Education), governors, headteachers, parents, and health experts to help produce specific guidance for secondary schools to ensure they are delivering a healthy school food environment.**

## 5.2 SUPPORT THE SCHOOL WORKFORCE

*“Cooking in classrooms can be done well and create fascination, or it can be done badly and put kids off cooking for life. For me, you’ve got to make food absolutely fascinating. And once you’ve got kids fascinated, then you can then start building on them, and start getting them to cook. The key is not about adults wagging fingers and prescribing how children should eat. It’s about inspiring, brilliant, funny young people.”*

— Stefan Gates, BBC Food Programme, July 2014

### Summary

**We must support the knowledge and skills development of the whole school workforce to enable high quality food education delivery supported by a positive whole school approach to food:**

- DfE should commission the development of a suite of professional development courses to support the delivery of effective food teaching in schools.
- DfE should commission a set of headteacher ‘*health and wellbeing core competencies*’ linked to wider standards for school leadership.
- A specific Initial Teacher Training ‘*health and wellbeing module*’ should be included as part of wider initial teacher training routes.

Our data and analysis show a widening gulf in the frequency and quality of food and nutrition learning opportunities and a patchy coverage of the food curriculum content in our schools.

Therefore, we must do more to ensure that all teachers recognise the importance and potential of embedding a healthy school environment and the role that great food education has in that. And support the school workforce so that they feel empowered to play their respective part. The School Food Plan talked about the ‘will and the skill’ of senior leaders in being able to support embedding a positive food culture,<sup>72</sup> but the ‘will and skill’ element plays out across the school workforce.

To help, there should be appropriate nutritional, health and wellbeing training, incorporated through initial teacher training, continual professional development and through to senior leadership training - in other words for the entire school workforce.

As the Scottish Government’s 2014 ‘Better Eating, Better Learning’ report said: *“The quality of food education is likely to be better where all teachers are knowledgeable and confident around food and its impact on health and wellbeing, and understand the wider context for food education.”*<sup>73</sup>

### 5.2.1 Improve training for the food teacher workforce

Food teacher numbers have dropped alarmingly over the last ten years.<sup>74</sup> The average age of the workforce is increasing. And teachers feel increasingly that they have to battle for adequate lesson time in the school curriculum. Despite the array of food education resources (e.g. lesson plans) available on search platforms like Countryside Classroom<sup>75</sup> and TES<sup>76</sup>, our findings showed that ongoing CPD training for food teachers was low, both at primary and secondary.

There are some excellent CPD food teacher providers, like the British Nutrition Foundation<sup>77</sup>, Food for Life and the Food Teachers Centre<sup>78</sup>. But at the same time, as organisations like the Children’s Food Trust, Focus on Food and others sadly shut down, the CPD offer is reducing, especially where

it can be offered for free. The Design & Technology Association, the professional body for Design & Technology, has a lonely single CPD course in ‘Teaching Food Safely.’<sup>79</sup> Fundamentally important of course, but not necessarily inspiring, and certainly not tackling the breadth of the curriculum.

PHE’s public facing Change 4 Life campaign has invested in its Schoolzone resources over the last couple of years, including sending every primary school a food education curriculum pack for Key Stage 1 and 2.<sup>80</sup> (We have heard from anecdotal feedback that the resources prove popular for Key Stage 3 pupils at secondary school too.)

But PHE resources have not focused on CPD support for food teachers. Our research has identified the need to ensure that food teachers are equipped to support pupils values and aspirations, and we should invest in ensuring they get this support.

### Proposed action:

**DfE should commission appropriate bodies to develop a suite of CPD courses to support the delivery of effective food teaching in schools.**

### 5.2.2 Train headteachers and senior leaders about the importance of enabling a healthy school environment

Action 7 of the School Food Plan sets out the National College for Teaching and Leadership (NCTL) commitment to include food and nutrition in their leadership training. Course material was produced and published,<sup>81</sup> but at the same time the role and remit of the college changed - and course content was delegated through to the myriad of respective teacher training providers. With such a fragmented landscape, it proved difficult to implement a national standard around food and nutrition training, or even as part of wider health and wellbeing.



Importantly, Government has recognised the importance of PSHE provision as part of a ‘whole school approach’, and whilst not currently a ‘formal’ curriculum subject, there is legal provision for DfE to make it so following a formal consultation, expected to start in the autumn of 2017.<sup>82</sup>

But we already know that many headteachers and other school senior leaders have asked for support in acquiring the ‘skill’ needed to embed a health and wellbeing culture in their schools.

#### **Proposed action:**

**DfE should commission appropriate health experts and headteacher leadership bodies to produce a set of health and wellbeing core competencies linked to the wider standards for school leadership.**

### **5.2.3 ‘Health and wellbeing’ provision in all Initial Teacher Training provision**

The Initial Teacher Training review, led by Sir Andrew Carter in 2014, led to a refresh of the Teacher Standards,<sup>83</sup> that then led to publication of the core competencies and behaviours expected of great teachers.<sup>84</sup> Sadly, the words ‘health’ or ‘wellbeing’ did not feature at all in the revised teacher standards.

At around the same time, PHE identified a potential to look at training for teachers, reporting in an appendix to their big sugar report;<sup>85</sup> *“There are many occupations and individuals who have the potential to influence the diet and health of those they come into contact with... The training of non-nutritionists is therefore an area that requires consideration and development.”*<sup>86</sup>

One of the strands of work that PHE wanted specifically to explore was to *‘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.’*<sup>87</sup>

In March 2015, PHE and the PSHE Association ran a joint workshop where they noted that *‘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.’*

A few initial teacher training providers, including the Universities of Sheffield, Cambridge and Winchester, have run recent pilots to address inclusion of food and nutrition in initial teacher training.

#### **Proposed action:**

**DfE should support one or more teacher training providers to develop and pilot a specific Initial Teacher Training health and wellbeing module to include as part of wider initial teacher training routes. This should include a recommended specified minimum content for food and nutrition.**

### **5.2.4 Ongoing CPD support for wider school staff on food and nutrition**

In March 2015, the School Food Plan published a CPD training resource entitled *“The importance of a good school food culture.”*<sup>88</sup> Over 40 expert organisations had come together, to produce a well tested and piloted free training resource to help all school staff deliver improvements in pupil health and wellbeing. The resource was supported by DfE and PHE.

Little action has since been taken by DfE to promote this resource and, apart from its promotion by enthusiastic and determined NGOs working with schools,<sup>89</sup> its scope and impact is limited.

#### **Proposed action:**

**The CPD Training Resource *“The importance of a good school food culture”* should become a mandatory quality criteria in the Healthy Rating Scheme for schools.**

## 5.3 IMPROVE RESOURCES

### Summary

Schools should be provided with the resources to facilitate delivery of better, more consistent food education:

- DfE and Defra should establish an educational/industry working group to make recommendations as to the appropriate mix of academic and vocational food qualifications.
- Government should consider investing in a cross departmental/cross sector food initiative aimed at promotion of food education in schools.
- A taskforce of food teachers, designers and chefs should design and develop an affordable ‘cooking cube’ for those 75% of primary schools that don’t have dedicated resources.
- The potential of a social investment loan scheme for schools should be investigated.
- Ensure the Healthy Pupils Capital Fund is both targeted to those schools that need the most help and is dependent on schools achieving the Healthy Rating Scheme.

What is perhaps most alarming from our findings is the breadth of the spectrum of food education in our schools. It really is a postcode lottery. Thankfully, many schools are seizing on the opportunities to use food education as a positive catalyst to improve the overall health and wellbeing school ethos and culture. But even more schools cite real challenges in delivering even the bare requirements of the curriculum.

### **5.3.1 Ensure an appropriate food route map all the way through school life.**

The current food education route map in schools is patchy. The *Cooking and Nutrition* curriculum takes pupils up to when they are 14, at that point they have the option to take the new, more academically focused, GCSE in Food Preparation and Nutrition, or to take a vocational qualification, such as Jamie Oliver's Home Cooking Skills Level 2 BTEC. Food A-Level was removed from schools in September 2016, though Nick Gibb, the Schools Minister, told Sara Jayne Staynes, CEO of the Royal Academy of Culinary Arts, in a meeting with food curriculum experts that it was a close decision.

The Food, Farming and Hospitality sector, Britain's biggest employer, has warned of both challenges and opportunities ahead in ensuring a highly skilled, vibrant UK workforce - ready to deal with the post-Brexit climate. Industry bodies such as the British Hospitality Association, Food and Drink Federation, the Institute of Grocery Distributors, and the Agricultural and Horticultural Development Board have been unanimous of the need to encourage more UK pupils to consider food as a viable and exciting career, and have set up initiatives like Brightcrop or the National Food and Drink Skills Academy to boost young recruits into the sector.<sup>90</sup>

The Department for Environment, Food & Rural Affairs (Defra) has long been interested in the role of food education in stimulating interest and excitement for food, farming and the environment. Back in 2010, Caroline Spelman, Defra's Secretary of State, launched a 'Big Society' task-force into looking at the role of *'Food Growing in Schools.'*<sup>91</sup>

In this context, many in the sector challenged the recent removal of food subjects as A-Level qualifications. (Currently, food education is the only curriculum subject not to have an A-level). Citing

not only the challenge of removing a route map for future food teachers themselves, but also raising the alarm that downgrading food as a subject matter in its own right, will have an impact on the number and skills of food career entrants. Our research has already highlighted the low status that food education is afforded in schools.

At the same time, the vocational food landscape is changing. The new apprenticeship schemes are bringing industry and the educational sector closer together. In May 2017, the Chancellor presented the proposed new vocational route for post-16 education<sup>92</sup> (known as T-Levels) following Lord Sainsbury's review). Two of the fifteen proposed subject areas have a food focus - *'Catering and Hospitality'* and *'Agricultural, Environmental and Animal Care.'* Details are yet to emerge, but they are intended to be delivered from 2019.<sup>93</sup> In 2016, and as part of the Progress 8 educational reforms, DfE published the list of those vocational technical qualifications that schools could teach that would still count as the equivalent of one GCSE. A few food related qualifications have qualified.<sup>94</sup>

However, many different bodies have called for better clarity to understand the links between the academic and vocational routes. We think all the sector bodies should come together, supported by Government, to clarify and confirm how our young people can ensure an appropriate food route map all the way through school life.

We also think the sector should revisit some earlier celebratory initiatives, like 2008's *'Year of Food and Farming'* that brought together health, education and environmental bodies around the simple purpose of celebrating the UK's food and farming sector and the multiple benefits that it brings.<sup>95</sup>

### **Proposed actions:**

**DfE and Defra to establish an educational/food industry working group to make recommendations as to the appropriate mix of academic and vocational food qualifications.**

**Government to consider investing in a cross departmental/cross-sector food initiative aimed at promotion of food education in schools.**



### 5.3.2 Providing schools with the right resources.

#### (i) Providing schools with the appropriate equipment

We know from our surveys that many schools still cite budget and lack of resources as barriers to delivering effective food education. An alarming number of food teachers reported that they believed lesson time and budget would be reduced over the next three years because of a lack of resources.

We know that many schools also struggle with appropriate infrastructure resources; primary schools often lack dedicated teaching kitchens. Yet we also know that excellent food education can be taught in the classroom and the school garden;<sup>96</sup> not to forget the science lab and school kitchens.

The School Food Plan's What Works Well website<sup>97</sup> aimed to showcase innovative ways schools delivered food education - from school gardens, science lessons, through to in-classroom dedicated resources like those provided by the Royal Academy of Culinary Art's 'Adopt a School Programme.'<sup>98</sup>

For schools to be able to deliver the requirements of the cooking curriculum, they need to have an appropriate level of resources. We recommend that schools report through the Healthy Rating Scheme (below) that they are allocating appropriate budget for use on equipment and ingredients.

But we also think some clever thinking should be applied to the type of cooking 'kit' that can be used, especially in primary schools. The former Focus on Food organisation sold an innovative cooking kit for around £600. And in the US, the Captain Planet Foundation has developed a cooking cart in collaboration with food teachers and schools (see case study).

#### **Proposed action:**

**A taskforce of food teachers, designers and chefs to design and develop an affordable 'cooking cube' for those 75% of primary schools that don't have a dedicated cooking room or equipment.**

#### (ii) Increase school funding for healthy interventions

Disappointingly, recent education spending decisions made in July 2017 seem to have reduced the healthy pupils capital fund.<sup>99</sup> No details have as yet been announced of how schools will be able to access this funding, and how it can be applied. However, we recommend that a focus is given to those schools with the greatest health inequalities, and to those schools that will commit to demonstrating how they meet criteria laid out in the Healthy Rating Scheme for schools.

We know that schools have wider capital funding needs if they are to be able to invest in creating workable healthy environments. Despite government providing over £160m of capital funding for schools to improve their dining and kitchen infrastructure to deliver universal infant free school meals, this did not meet the heavy demand - and was of course only distributed to primary schools. A survey conducted for the National Association of School Business Managers in May 2017 showed that two-thirds of schools surveyed would like to make improvements to their dining space.<sup>100</sup>

Recognising that school funding is under significant strain, we believe there is scope to investigate how public health funding could be used to invest in both school infrastructure and targeted interventions designed to improve children's health and wellbeing. There are some early emerging examples where social investment (such as a social impact bond) is funding public health interventions. A useful diagram (from the US National Governors Association) demonstrates the model of social impact bond investment.<sup>101</sup>

#### **Proposed action:**

**Big Society Capital (or other social investment brokers), the Education Funding Agency and Public Health England should come together to investigate the potential to introduce a social investment loan scheme for schools focused on creating health supporting environments.**

## 5.4. REPORT BACK AND EVALUATE

### Summary

Reporting and evaluation of food education, food culture and food provision should be mandatory:

- The government's proposed Healthy Rating Scheme for schools should be a mandatory requirement for all schools.
- The five measures identified in the government's School Food Plan must be carried out.
- Ofsted reports should always report back on ways the school is addressing pupil's physical, nutritional and emotional health and wellbeing.
- Ofsted should ensure that inspectors have the appropriate skills and competence in health and wellbeing to be able to assess appropriately.

#### 5.4.1 Make Healthy Rating Scheme for schools mandatory

The Child Obesity Plan lays out plans to ‘introduce a new voluntary healthy rating scheme for primary schools to recognise and encourage their contribution to preventing obesity by helping children to eat better and move more.’<sup>102</sup> Despite intentions to start the scheme in September 2017, no specific details have yet been released. As noted earlier, an expert group should be established to work up specific guidance for primary and secondary schools in developing a positive school food ethos and culture. This group should look at how practices can build on evidence based frameworks for a whole school approach, such as the Food for Life schools award and Healthy Schools London, recognising schools who have achieved these awards.

#### Proposed actions:

The Healthy Rating Scheme for schools should be a mandatory requirement for all schools, not just primary schools, and it should be renewed every three years.

Schools should be required to report against their Healthy Rating Scheme award activities, citing activities undertaken to support good nutrition, active lifestyle and emotional wellbeing.

**We have asked some organisations already delivering great health and wellbeing quality assurance schemes in school to help draw up some pointers around food and nutrition for DfE and PHE when they commission the scheme.**

#### Quality Assurance scoring to include:

- School’s response to the National Child Measurement Programme
- Evidence of a whole school food policy in place and being monitored, including reward, fundraising, and celebration practices
- Evidence of children being able to cook healthily and apply the principles of healthy eating
- Pupil voice survey and feedback on diet and physical activity
- Proof that School Food Standards are being consistently applied across the whole school day (including packed lunches, and out of normal school hours provision)
- Delivery of CPD training in health and wellbeing for staff, and staff policies on healthy living
- Evidence of parental engagement and ‘take-home’ behaviours
- Availability of healthier cheaper food options

**We also like the Healthy Schools London Review tool<sup>103</sup> that is categorised under seven headings:**

1. Leadership, management and managing change
2. Policy development
3. Learning and teaching, curriculum planning and resourcing
4. School ethos, culture, environment and spiritual, moral, social and cultural (SMSC) development
5. Provision of support services for children and young people
6. Staff continuing professional development (CPD), health and wellbeing
7. Partnerships with parents/carers, local communities, external agencies and volunteers to support pupil health and wellbeing

### 5.4.2 Measure children's cooking skills and set Key Performance Indicators for delivering food education in schools

Chapter 12 of the School Food Plan, entitled 'What Gets Measured gets done', laid out five measures to track progress of implementing the Plan's seventeen actions. For food education, government agreed to measure the *'number of 16 year olds able to cook a repertoire of five savoury dishes.'*<sup>104</sup>

We asked the British Nutrition Foundation to list some 'starter' Key Performance Indicators for primary and secondary schools delivering their curriculum requirements. This is what they suggested:

#### British Nutrition Foundation's suggested key performance indicators for *Cooking and Nutrition*

##### Pupils

As a minimum, all **primary** school pupils should have:

- 18 hours per year on food education, of which 12 hours should be practical
- experiences in:
  - growing food and learning about food origins
  - preparing and cooking ingredients for (predominantly savoury) dishes
  - applying healthy eating in context of their health and wellbeing
- their ingredients provided for lessons
- a safe and hygienic space to learn how to cook

As a minimum, all **secondary** school pupils should have:

- 24 hours per year on food education, of which 16 hours should be practical
- experiences in:
  - growing food and learning about food origins
  - preparing and cooking ingredients for dishes
  - applying healthy eating in context of their health and wellbeing
- cooking lessons that are no shorter than 60 minutes

**their ingredients provided for lessons**

##### Schools

As a minimum, **all schools** should:

- allocate a ring-fenced budget for food education (£/per pupil)
- follow Cooking and Nutrition, as set out in the national curriculum (England)
- set a curriculum which supports progression in teaching and learning from one year group to the next, as set out in the Government's Core Competences for Children and Young People aged 5 to 16 years
- nominate a Food Education Lead, who co-ordinates, monitors and reports on food education activities throughout the school to SLT, ensuring tie-in to whole school food policy
- ensure that all teachers that teach food are trained to (or working through) the Government's Food teaching in primary/secondary schools: knowledge and skills framework
- have a whole school food policy/plan which is implemented, monitored and reported

## Proposed actions:

**DfE to incorporate these Key Performance Indicator measures into the new Healthy Rating Scheme for schools, and to issue renewed guidance to schools.**

**The measures identified in the government's School Food Plan must be carried out on an annual basis, including assessing children's knowledge, skills and confidence in being able to cook and eat well.**

This measure would certainly give a clear indication of the knowledge and skills gained. The British Nutrition Foundation has developed an online tool called *'My Cooking Counts'*, and we think this should be adopted more widely.

But alone it will not ensure that schools are taking the appropriate whole school approach needed to ensure a positive healthy environment.

### 5.4.3 Ofsted to report on health and wellbeing

Under Ofsted's Common Inspection Framework, which came into force in September 2015, inspectors assess how *'children and learners keep themselves healthy, including through healthy eating'*<sup>105</sup> (as part of the Personal Development, Behaviour and Welfare judgement). Ofsted also confirmed through the School Food Plan that they would ask inspectors to look at *"the food on offer and visit the canteen to see the atmosphere and culture in the dining space and the effect this has on pupils' behaviour."*<sup>106</sup> Inspectors would also look at the *"breadth and balance of the curriculum, of which practical cookery is now a part."*

Ofsted wrote to the All Party Parliamentary Group on School Food in early 2015 to state their commitments<sup>107</sup> but have since been challenged in demonstrating delivery. Timothy Baker, headteacher at Charlton Manor Primary School, undertook a review of 20 London 'Outstanding' schools Ofsted reports in February 2016 from the previous year. Only one report mentioned food and healthy eating, with a generic: *'pupils were able to identify what constitutes a healthy meal.'*

Ofsted were tasked in the Child Obesity Plan to *'undertake a thematic review on obesity, healthy eating and physical activity in schools. The review will provide examples of good practice and recommendations on what*

*more schools can do in this area.'*<sup>108</sup> This work has recently started, but, we think that Ofsted should be compelled to do more than just give examples of good practice and recommendations. It did this in its 2010 *'Food in Schools'* report, where it noted *'The most significant and consistent weakness that the survey identified was the quality of schools' monitoring of the food they provided and the impact they were having on encouraging pupils to adopt healthy diets and lifestyles.'*<sup>109</sup> Instead, we need to ensure Ofsted report back through their inspection framework.

## Proposed actions:

**All school Ofsted reports should report back on ways the school is addressing pupil's physical, nutritional and emotional health and wellbeing.**

**Ofsted should ensure that inspectors have the appropriate skills and competence in health and wellbeing to be able to assess appropriately.**

## 6. CASE STUDIES



## Food for Life at Heron Cross Primary, Stoke on Trent

Heron Cross Primary School in Stoke-on-Trent has used the Food for Life School Award programme since 2014 to adopt a whole school approach to food, ensuring that lessons on healthy eating are reflected in the daily life of the school. Heron Cross gained a Silver Food for Life Award in 2017 and actively involves parents and the wider community in cooking and food growing activities.

*“Being part of the Food for Life School Awards programme has taught our children how to grow, cook and to understand the importance of a healthy lifestyle. It has become the bedrock of the education system at Heron Cross Primary School.”*

— Dorrie Shenton, Headteacher of Heron Cross Primary School.

Food for Life has supported Heron Cross to embed cooking in the curriculum across the school and beyond the school gate. The Home-School Link lead works with the Design and Technology lead to organise regular Food for Life-themed events and activities and hold a cooking club for Key Stage 2 pupils and their parents. The school has created cooking boxes for each year group and pupils make and sell soup to parents at their school farmers markets, along with ‘Cook Kits’ with recipes and pre-measured ingredients.

*“I really enjoyed spending time in the cookery session, seeing the skills Nathan has learned. He will now be putting these skills to use at home. Thank you for inviting me”.*

— Lisa, parent of a pupil from Year 3 Cooking Club

*“Since I have attended cooking club, I make stuff at home with my mum. I try new recipes and take part in the Cookathon.”*

— Lucas, aged 11

## Impact of the Food for Life School Awards programme at Heron Cross Primary School

- Heron Cross uses the food growing area to give confidence to EAL (English as an Additional Language) pupils, while improving their literacy.
- Food for Life has trained seven staff to teach cooking skills, and all pupils from nursery to Year 6 now take part in cooking activities.
- Cooking boxes and Food for Life resources have been put together for each year group, including age-appropriate equipment needed for cooking lessons
- School Nutrition Action Group (SNAG) meetings give pupils the opportunity to talk about food and the food culture within the school
- Pupils visit local farms and local farmers make regular visits into this city centre school

Stoke-on-Trent City Council public health team has commissioned Food for Life over 5 years to support all primary and secondary schools across the City to achieve Food for Life School Awards. The City Catering service has achieved the Food for Life Served Here Silver Award for 75 primary schools and 4 SEN schools, verifying that school menus use fresh, local, quality ingredients and meet the School Food Standards. According to Public Health England’s Health Profile 2017, Stoke-on-Trent is among the 20% most deprived local authorities in England.

## Flavour School

Flavour School is an exciting new programme of food education in Britain, based on the tried and tested SAPERE method from Scandinavia. It is a very simple sensory approach to food learning, aimed at building a generation of children who have a healthier relationship with food. It requires minimal resources from teachers, and it can be used in conjunction with cooking on the curriculum and other food education, but the potential impact is immense.

A headteacher in the East of England recently told us that when Reception children in her school are first offered their free fruit at snack time, some of them don't know that you have to peel an orange before you eat it.

Most children in Britain don't know how to cook. But our problems with food go deeper than this. Children also don't know *how to eat*, or at least not in ways that sustain their future health and wellbeing. A child has no chance of becoming someone who eats oranges until he or she knows what an orange is. The knowledge about food that determines someone's future food preferences happens not at a logical level but through the senses. Until you can truly know a food, and decide whether you like it or not, you need to have interacted with it and this happens through the senses: touch, smell, hearing and sight as well as taste.

Flavour School is a programme of lessons and simple, fun experiments that help school children (and adults!) learn about the senses, textures, taste and flavour, in order to give them more confidence and curiosity to try new things - a fundamental building block for developing healthy attitudes to food and eating.<sup>110</sup>

At Washingborough Academy in Lincolnshire, one of the schools where Flavour School has been successfully trialled, this was a lesson plan for learning about smell:

*"Five different food samples were put into tins and covered with foil with tiny holes put in it. The children then had to move round all 5 tables with the pots on and guess by smelling what was in each pot. They then*

*made up their own word bank of all the different smells. We talked about what parts of our body we use to smell with."*

Feedback from teachers in Lincolnshire, Cambridgeshire and Buckinghamshire, where Flavour School has been trialled, suggests that getting children to interact with food through their senses can be a powerful way to change the food habits not just of children but of the whole family. After a lesson tasting five different varieties of apple, one teacher remarked that it was 'lovely' to hear children talk about asking their parents to buy particular apples at the supermarket over the weekend. Teachers have also remarked that it's a powerful to widen a child's food vocabulary. In one session, 5 year-olds at St Matthews in Cambridge compared orange tomatoes to 'an ogre's club', 'a light bulb', 'an orangey pear'.

Flavour School can be run as standalone lessons, or integrated into existing classes and subjects. It's cheap and easy to do, and can be adapted to different age groups and settings. We provide resources, training and support to teachers and other educators to embed sensory education into the classroom. So far, we have developed a draft Flavour School manual, which is being tested in a selection of UK schools. The next step, for autumn 2017, is to develop a better toolkit for teachers based on feedback from those schools, and to offer training to teachers to run the programme. After plenty of positive initial feedback, we now need funding, e.g. to develop and design the toolkit for schools, to coordinate and deliver training, to get the word out, and to deliver research into the impact of the methodology, so it can be improved further and to provide evidence with which to influence policy makers of its value.

Ultimately, we would like to see sensory education become part of the school curriculum and seen as a basic part of every child's food literacy in the UK and beyond.

**Bee Wilson, food journalist and author.**

## ISS and School Food Matters

School caterers ISS – in association with the charity, School Food Matters, invited schools to apply for £250 garden scheme grants per year over two years. Strimmers, scarecrows, ponds, orchards, raised beds, herbs, soil, greenhouses and more were purchased across the London borough. Lowther School hosted a gardening training day for teachers and pupils from across Richmond schools, run by TV gardener, Chris Collins, to launch the programme.

Over 250 children then joined ISS for a Food Education Event Day (FEED). Designed to educate children about the importance of eating good quality, healthy food, FEEDs include a host of activities centred on child health and wellbeing. Children enjoyed gardening activities, blind tasting, smoothie bikes, nutrition talks and exercise classes.

## Adopt a School

The Royal Academy of Culinary Arts' Adopt a School Trust delivers holistic food education in schools. Chefs and hospitality professionals deliver practical sessions, including taste and sensory, basic cookery skills, bread making and front of house. Recognising that the majority of primary schools lack teaching kitchens, the Adopt a School programme has been designed to teach children the basics of food and cookery without the need for cooking facilities. It helps children to develop healthy eating habits and encourages an enthusiasm and interest in food and cooking, food provenance and sustainability.

Adopt a School has been working with contract caterers, including Harrison Catering Services and Caterlink, to provide an innovative solution to support schools to effectively deliver food education and adopt a whole school approach to food. School cooks and chefs are trained to deliver the Adopt a School programme to pupils in their school. As well as supporting schools to deliver the cooking and nutrition element of the primary curriculum, it contributes towards school chefs' and cooks' continued professional development and creates closer links with the school community.

## Captain Planet Foundation

In 2009, the Captain Planet Foundation (CPF) analyzed data from over 700 school gardens funded through our national Small Grants Program to identify the best practices that resulted in the highest use of school gardens by teachers. The outcome was CPF's Project Learning Garden, a holistic curriculum-supported school garden program that directly serves pre-Kindergarten through middle school students.

Through hands-on, garden-based lessons in math, science, social studies, health, and language arts, students have the opportunity to engage in fun, physical activity outdoors, learn about natural systems and food origins, and develop an early palate for fresh vegetables when students enjoy their harvest in the classroom and cafeteria.

CPF gives administrators and teachers the tools to use school gardens as an extension of traditional classrooms rather than an extracurricular activity. Studies have shown that this integrative approach can increase student achievement in measures of standardized testing across all disciplines, especially in science; and can influence healthier eating behaviors leading into adulthood.

## Cornerstone Academy Trust – dining service at Broadclyst Community Primary School

Broadclyst Community Primary School (BCPS), in East Devon, has developed a whole-school approach to food, health and well-being which has involved a complete transformation of mealtimes and improved the school's approach to food education, teacher training, and school sports.

The school has created a family dining system where the children and staff sit and eat together. The year groups are mixed and the older children support and serve the food to the younger children at the table. The food is delivered to the tables.

The school is helping children to understand the need to make choices about healthy lifestyles, giving them the chance to try new foods and develop new tastes alongside teaching them why they might want to choose a healthier, balanced diet. This 'food culture' includes the teaching of cooking, an understanding of healthy living and an enjoyment and engagement in sport and exercise. The feedback from parents has been positive, and the school has seen over a 50% increase in the number of children having a school dinner.

### **Food education and the healthy school environment**

At BCPS, changing food culture starts with quality, tasty food, presented well and eaten in a pleasant dining environment – the family dining that's often missing at home – and it is part of the education of the school, not just the lunch break. The children learn how to lay the table, hold a knife and fork and socialise appropriately, and they are involved in the menu design too.

There are efficient pre-ordering systems to reduce waste, and the staff and teachers eat with the children, encouraging them to try new foods.

The school employs its own trusted school nurse, who visits the classrooms helping to deliver an understanding of nutrition, as part of a health and well-being programme. This is combined with

opportunities for positive engagement in sporting opportunities and physical activity as well as teaching the children, through cooking lessons, about different cultures and food types, and the pleasure of food. These are not one-off lessons – changing habits and forming new ones is a process, where the children are engaged, and learning, through making active choices in a whole-school approach where the dining service is at the heart of the day.

Of course, this radical approach required the approval of the governors, because it needed a significant investment of time and money to enable it. In addition, the leadership team had to drive it through, in the design of the curriculum, the training and development of staff, the design of the services and in championing the culture.

Jonathan is clear: "Without that commitment, you are left with people begrudging their precious time at lunch, simply involved in behaviour management while children are in the 'scoff and off' mindset." He is also aware of how important parents are to the success of this mission to provide food awareness, health and well-being culture within their children's education: "It is essential that they understand that it's not about the cost of the meal, but the long-term benefit to their child. They are the hardest group to move – if the child goes home saying they don't like the school dinner, loving parents can so easily undermine the investment and effort of the school."

## 7. PARTNER ORGANISATIONS

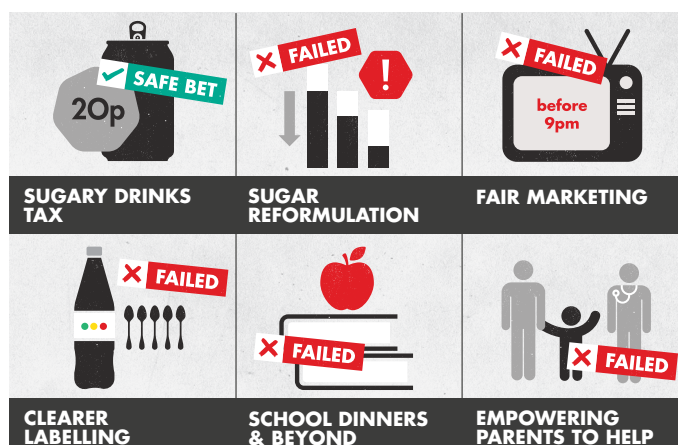


# THE JAMIE OLIVER FOOD FOUNDATION

The Jamie Oliver Food Foundation is focused on the health and happiness of future generations, through the food that they eat. At its heart lies Jamie's ambition that all young people should have a love of good, healthy food. This means all children should have the right:

- To be able to understand where food comes from
- To have a deep understanding why good food is important for health (both for ourselves and our planet)
- To acquire the practical skills and confidence to be able to grow and cook food from scratch

Together with medical experts and professionals, Jamie Oliver has drafted a **six-point plan**,<sup>111</sup> targeted at those businesses and politicians who have the power and position to put in place the measures necessary to tackle the problem of rising obesity levels among children. His six-point plan recommends straightforward, proven policies which would immediately improve our children's diets and health.



## *Jamie and school food:*

After Jamie's School Dinners aired in 2005 and revealed the terrible standards of school food in the UK, Jamie started passionately campaigning for better food in schools, improving the nutritional quality of school food by introducing food standards and getting rid of the 'junk food' that was available in the school environment.

# THE UNIVERSITY OF SHEFFIELD

Founded in 1905, the University of Sheffield has grown in reputation and size to become one of the UK's leading universities with a global reputation for teaching and research. As part of the UK Russell Group, the University is a premier-league, research-led institution with over 27,000 students including almost 7,000 international students from 150 countries and over 8,000 members of staff.

Staff at Sheffield are experts, respected by their peers all over the world from Harvard to Tokyo. Their work drives positive change, empowering people and making communities stronger. They are dedicated teachers who will challenge students to achieve their very best.

99 per cent of the research submitted by academic staff has been rigorously judged as internationally recognised, internationally excellent or world leading and the Research Excellence Framework places Sheffield in the top 10 per cent of all UK universities.



The  
University  
Of  
Sheffield.



# BRITISH NUTRITION FOUNDATION

British Nutrition Foundation is a national charity whose core purpose is to make nutrition science accessible to all, interpreting, translating and communicating often complex scientific information. They aim to generate and communicate clear, accurate, accessible information on nutrition, diet and lifestyle, which is impartial and relevant to the needs of diverse audiences, in particular the general public, the media, government, schools, health professionals, and food and beverage companies. Through active engagement with governments, schools, the nutrition science community, the wider food industry from farm to plate, health professionals and journalists, they aim to provide

advice to help shape, support and deliver nutrition and health policy and so facilitate improvement in the diet and physical activity patterns of the population.



# FOOD TEACHERS CENTRE

Food Teachers Centre is a UK based self-help group founded by Louise T Davies in 2013 and supported by experienced associates. It provides a platform to exchange best practice, give advice and support to less experienced teachers, answering practical concerns and keeping them abreast of the latest curriculum changes. A one-stop shop for like-minded professionals who seek help and information. It is free to take part and is facilitated through a closed on-line group, safeguarding the conversations of the teaching staff. This pro-active group has 4,700 food teachers taking part, and 8,000+ subscribers keeping in touch via newsletters and events.

The idea of a 'Teacher's Centre' is a response to the lack of local and national specialist support and diminishing Continuing Professional Development

with the demise of local authority advisers ASTs, and lead practitioners. The Centre utilises new technologies, not requiring a physical space in new times, but providing the same high quality service that our traditional teachers centres were recognised for. The Food Teachers Centre is a place of:

- Creative and innovative ideas and action.
- Practical solutions.
- Learning and sharing.



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  2. 'turn on' their senses by sensing different food items, e.g. basil for smell, cauliflower for touch, lemon for taste, celery for hearing, pomegranate for sight;
  3. use all of their senses to try new and familiar foods
  4. create different food flavours, textures, appearances and aromas.
  5. develop ways of communicating about food in more complex ways (not just like/don't like)
  6. express and discuss their preferences with regard to food (e.g. how food looks, smells, tastes). (Hart, 2014:45)
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