

A young girl with dark skin and braided hair is sitting at a school cafeteria table. She is wearing a grey jacket over a dark blue t-shirt that has a circular logo with a pink unicorn and the words 'ADVENTURE FRIENDSHIP'. She is looking towards the camera with a slight smile. In front of her is a white plate with a meal consisting of a brown gravy-covered patty, green vegetables, and a slice of bread. She is holding a piece of the bread. The background shows other tables and chairs in a brightly lit cafeteria.

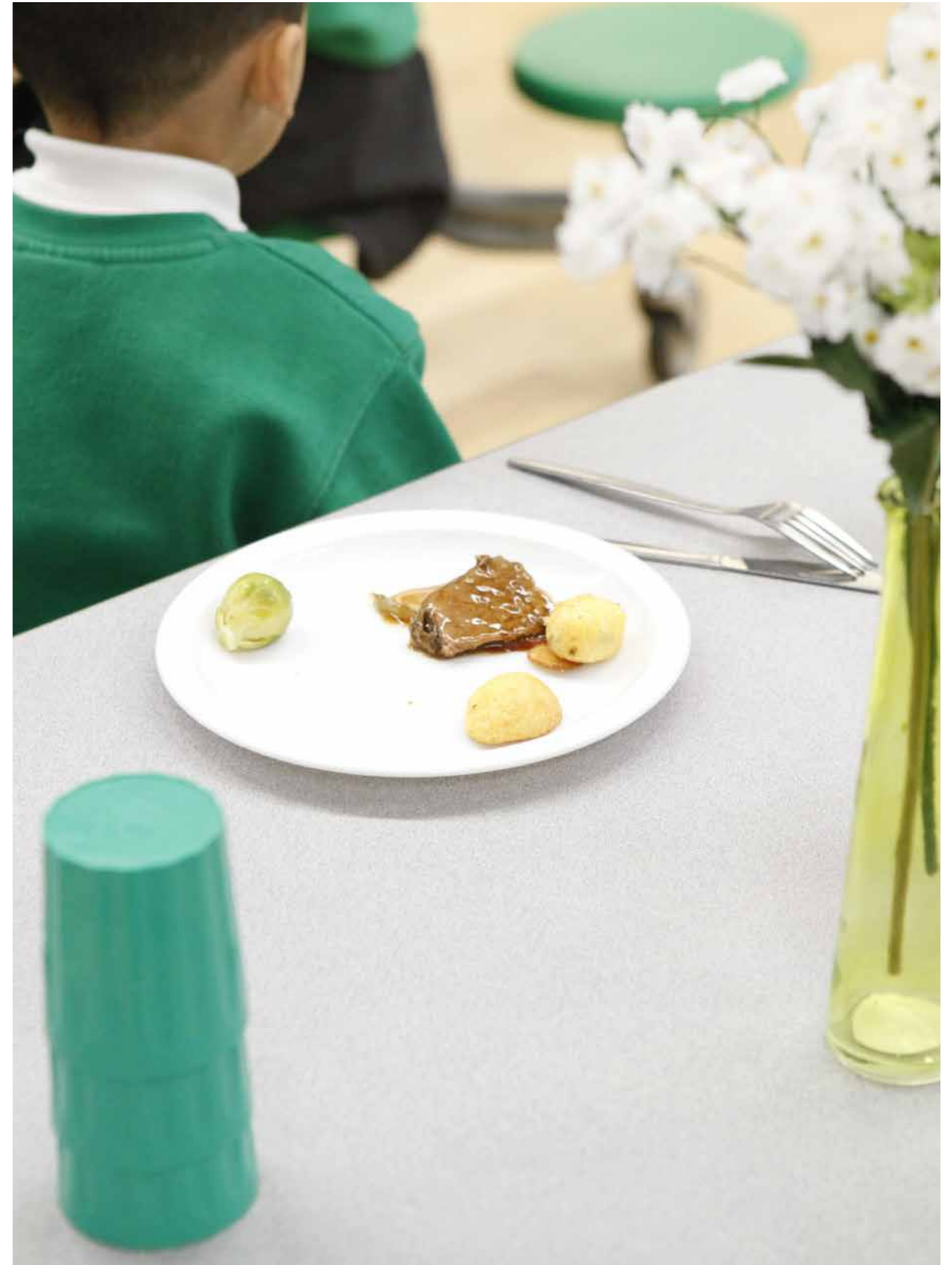
GUY'S &
ST THOMAS'
CHARITY

Serving up children's health

Opportunities and barriers in the school food system
to prioritise nutritious food for our young people

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Foreword



Henry Dimpleby

It is now 15 years since Jamie Oliver’s school dinner campaign and seven years since John Vincent and I wrote our School Food Plan. In that time the quality of school food, has improved immeasurably. But - in many ways more critically – the importance of school food to our children’s education, their health and their enjoyment of school is understood better than ever. This has become a mainstream political issue.

However, there is still much to do. There are too many schools - as this important new report shows – that still serve food that is bland, boring and beige; where the leadership haven’t fully grasped the importance of raising the status of school food or the staff who cook it; where the opportunity to create real cultural change by having the whole school – teachers and pupils - eating together is being passed up. These problems are particularly crucial to address in more deprived areas where many children and families face significant barriers to accessing nutritious food.

This report not only highlights problems, it offers solutions - ways in which we can improve procurement, funding and accountability.

We are, I think, 15 years in to a 30-year struggle. And this report is a bracing reminder of what we set out to do, what has been achieved, and what remains to be done.

Executive summary

If you’re reading this report, you probably know that in 2013 a new School Food Plan and accompanying School Food Standards¹ set out requirements for all food served at schools and academies in England. The principle behind the School Food Standards is that every child deserves access to the food they need to be healthy, no matter where they live or what sort of school they go to. Their first paragraph states that the Standards are “intended to help children develop healthy eating habits and ensure that they get the energy and nutrition they need across the whole school day.” Achieving the baseline School Food Standards is therefore a minimum requirement for schools and caterers to meet, in order to serve fresh, balanced plates of school food.

Unfortunately, without any formal monitoring compliance is patchy. While some schools and caterers have embraced the mandatory Standards, others have struggled to apply them in practice.



A nutritious diet plays a key role in children’s health and well-being. But it is something that young people from families on low incomes find much more difficult to access. It’s time to both review the Standards and commit to proper monitoring of their application. Access to nutritious food throughout the school day must be

the norm for children, and in light of drastic changes to school life in the aftermath of COVID-19, this is the ideal time to put children’s health at the heart of the school food system.

As schools and academies adjust to a new normal, we have a unique opportunity to ‘build back better’, making bold changes to food provision that put young people’s health first. It is crucial that social distancing guidelines do not impact on pupil’s nutrition and that we find innovative ways to make healthy hot meals available to all who require them, rather than relying on packed lunches which, as we see later in this report, are not a balanced alternative.

With pupils eating at least one meal a day in school, and many having breakfast and snacks on site, school food can have a huge impact, both in the short and long-term, on their health. A well-functioning school food system should promote better health outcomes for all children - and in turn, happier lives.

This report will use the term ‘school food system’ to include catering companies, local authorities, government policymakers, headteachers, senior leadership teams, school governors, cooks and kitchen staff, lunchtime supervisors, pupils and their families, charities working around school food and other stakeholders. It is clear that all are reliant on each other and can only achieve good nutrition for children and young people by working collaboratively.

¹ The school food standards apply to all maintained schools, and academies that were founded before 2010 and after June 2014.’ Throughout this report we will use ‘school governing bodies’ as a catch all term for those with governor/trustee responsibility in state schools and academies.



Last year we conducted on-the-ground research to review the school food provision across 60 inner-city schools with specialist food consultancy [Cookwise](#). The findings uncover significant differences between what is mandated by the School Food Standards, what appears on menus, and what actually ends up on plates and in students' mouths.

In other words, the School Food Standards exist on paper, but not on plates.

60%
of secondary schools are failing to comply with school food standards

While there are schools with very good provision, in which the School Food Standards are having their intended effect, in this research group these schools were the

exception, rather than the norm. And we know that Standards compliance is similarly patchy across the country. The [2019 State of the Nation report](#) from Food for Life found that at least 60% of secondary schools in the UK are failing to comply with School Food Standards.

The challenge is not for individual schools to solve alone, but for all actors in the school food system to take responsibility for the crucial part they play in prioritising children's health

The question is, why have the principles behind the School Food Standards failed to translate into practice? The challenge is not for individual schools to solve alone, but for all actors in the school food system to take responsibility for the crucial part they play in prioritising children's health.

The food children eat at school is as important as their education in giving them a healthy start in life. Currently there is a postcode lottery in the quality of food our children are eating at school. Worryingly, our research shows that this variation in nutritional quality impacts most on the children growing up in the poorest areas, who are also most likely to be at risk of food insecurity and rely on Free School Meals.

Improving the quality of school food benefits all children, and is an important lever to close the gaps in health between children from the lowest and highest income households. Action from Government, caterers, local authorities and schools themselves is needed to ensure all children are served nutritious meals at school.

Our research explored the daily working of the current school food system and found:

- Complex funding structures, combined with a lack of national guidance on good procurement, means saving money is often prioritised by caterers and schools over children's health
- The School Food Standards are not monitored at school level and as a result the compliance is patchy, with nutritional quality of food compromised

- National and local government have a greater role to play in supporting schools to adequately fulfill their responsibilities when it comes to healthy food
- There are some great examples of innovative techniques to design school food and canteens that make healthy food affordable and appealing. However, the system does not incentivise this innovation and so it ends up being the exception, not the rule

?
Do you care about improving school food?
We'd be keen to discuss this report further.
Please get in touch via communications@gsttcharity.org.uk

Our key recommendations:

We recommend the following areas be prioritised:

Procurement and regulation

- Department for Education to adapt the school food procurement guidance so that contracts explicitly weight value towards nutritional quality of food as well as cost
- This guidance should cover food quality, finance, contract types, employee training and remuneration (including real living wage for all school catering staff), and support schools (particularly Headteachers and Governors) to source the best possible food provision.

New funding mechanisms and eligibility

- Long-term we are calling for universal free breakfasts and lunches in both primary and secondary schools
- Transparent, clear and simple funding mechanisms would underpin successful delivery of national school food policies and ensure that nutritious food is being provided at school throughout the day
- Shorter term, we support the National Food Strategy recommendations to extend eligibility of Free School Meals for those children particularly at risk of health inequalities, including those from families with no recourse to public funds

Monitoring and accountability

- Department for Education and local government to put in place mechanisms that hold schools and caterers to account for meeting Schools Food Standards in practice
- Department for Education to be more transparent about the level of nutritional quality that different caterers and schools deliver per pound spent

Working together, we can realise the enormous potential of school food to make a positive impact on children's health and wellbeing.

Research methodology

About this report

We first commissioned Cookwise in 2019 to review school food in one London borough. This area encapsulates many of the challenges children face growing up in inner cities across the UK, where those from less affluent neighbourhoods are significantly more likely to be overweight than those from more affluent ones. Young people from families on a low income are flooded with unhealthy food options in public spaces and, our research found, at school. Healthier options are often more expensive and not marketed to young people.

Cookwise is a specialist food consultancy, and they led the review with Laura Matthews Nutrition Ltd. Reviewers visited a total of 60 primary and secondary schools, including some in academy chains, taking detailed observations and notes about the food on offer throughout the day, the food consumed, the wider school food environment and catering operations.

60 schools
were reviewed in
our research

Where possible, reviewers spoke to the headteacher and/or senior leadership team at each school, as well as their catering staff, who were either employed in-house by the school or by an outsourced catering company. It should be noted that it was generally harder to gain access to secondary schools, which therefore

represent a smaller proportion of the sample. This may be indicative of more significant challenges to improving food provision in secondary settings.

The research methodology was designed to examine areas most likely to impact on healthy weight, including: the existence and effectiveness of food and drink policies in schools; portion sizes and nutritional balance of plates; training of kitchen and school staff; the presentation and range of healthier and unhealthy break time food in secondary schools; whether puddings were optional and if they were served after the main course in primary schools; and provision and accessibility of water fountains. Areas such as food education and school gardens were not a focus for this review as, although important for children's wider learning and development, there is not strong evidence that these activities alone have an impact on childhood obesity.

We co-designed this review process to help us gather accurate insights into how School Food Standards are being implemented in practice. We think this approach provides a good starting point for policymakers considering how to introduce monitoring of school food and associated benefits on pupil health. Monitoring is key to holding all schools and caterers to account


on the quality of the food they're serving. The cost of this approach feels value for money, compared to the size of the public budget being spent on food in schools.


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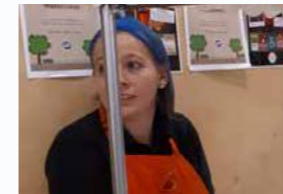
This research forms part of a broader programme of work led by Guy's and St Thomas' Charity aimed at tackling the inequalities related to childhood obesity.

Currently, children from families living in areas of below average incomes are significantly more likely to be overweight. Focusing on the London boroughs of Lambeth and Southwark, the charity aims to bring the childhood obesity rates in those areas down in line with rates in more affluent areas. We know that many young people are flooded with unhealthy options with very little access to healthy, affordable food. This report contributes to the body of evidence that demonstrates that the current school food system is not supporting all children to live a healthy life. In this report we hope to inspire actors in the school food system to work in partnership to make much needed changes, through highlighting clear challenges and opportunities uncovered by the research.

Collecting the research:

 **Reviewers visited 55 schools (Primary and secondary)**

 **And called a further 22 schools**



Reviewers talked to chefs and kitchen staff, and school leaders



Reviewers observed what was eaten and what was thrown away



Reviewers studied where children were eating



Reviewers saw what was being prepared, and how it was served

Below are some of the criteria that we used to assess the schools in our research.

- Are there water fountains in the school?
- Does the layout support good food choices?
- Are staff encouraging children to try the healthier option?
- Are children required to have their main meal before their pudding?
- Does the school do any training for meal time supervision?
- Does the breakfast club menu comply with SFS?
- Does the food at after school clubs comply with SFS?
- Does the school have a School Food Policy?
- Does the school have a packed lunch policy?
- Can children feedback about lunches?
- Do the children's plates represent the menu?
- Are the plates balanced?
- Are the portion appropriate for the children's ages?



School food policies

School food policies

It is important for each school to have a well-considered food policy, guided by the School Food Plan and School Food Standards. While awareness of the School Food Standards appeared fairly high, many schools reviewed did not have an overarching food policy, while many others were not fully implementing existing policies. This meant reviewers saw a lack of compliance with School Food Standards across the school day in many schools visited.

A well-executed and utilised school food policy can prove a very useful starting point for ensuring high-quality, nutritious food. A robust policy is particularly important when developing a specification for a new school food contract. Many schools receive little to no support in managing the contracting process, so a policy can be an effective way of sharing guidance, while holding catering providers to account. Policies help confirm that schools are clear on the food they provide from the outset, whether by a contractor or in-house. They are valuable tools for ensuring everyone involved in food provision and in the wider school community takes responsibility for the on-going quality of the food on offer.

57%
of primary schools did not have a school food policy

Schools with a School Food Standards compliant food policy :



Our reviewers found that more than half of primary schools (57%) did not have a school food policy, while a further 12% had a policy but did not actually comply with it, leaving just 31% of primaries having a policy that is followed to at least some degree. It was common for staff (including senior leadership teams) to be unaware of the document at all, and for cooks and kitchen staff not to have been involved in its creation.

None of the primary schools identified as having the most need for improvement in their food provision had a school food policy.

At secondaries, the picture is a little different. Policies are more widespread - 80% of those reviewed have a school food policy. However, these documents are rarely implemented (or even known about) by catering staff, so do not translate to a healthier food offer.

Although awareness of the government's School Food Standards is generally high... many schools are unaware that it applies to all food served through the day



73%
of schools we visited had School Food Standards-compliant lunch menus

Although awareness of the government's School Food Standards is generally high, notably reviewers found many schools are unaware that it applies to all food served through the day, not just lunch. This is where we think policies can play a key role in ensuring food provision is nutritious and high quality throughout the school day. In total, 73% of schools visited had School Food Standards-compliant lunch menus. However, that often did not translate into children actually eating healthy, Standards-compliant meals.

WHERE NEXT?

We would like to see the school food system make it easier for headteachers and school governors to play an active role in creating and overseeing strong food policies to protect children's health. This should include ensuring school governors receive training on their school food responsibilities as part of their induction to becoming a governor. In creating and reviewing policies, heads and governors need to have access to suitable guidance and should engage the rest of the school community, including cooks and kitchen staff, pupils and parents in their development

School catering system map*

*based on one inner London borough

Source: "School Lunch Catering Market", Brook Lyndhurst for Guy's & St Thomas' Charity and Southwark Council, September 2020

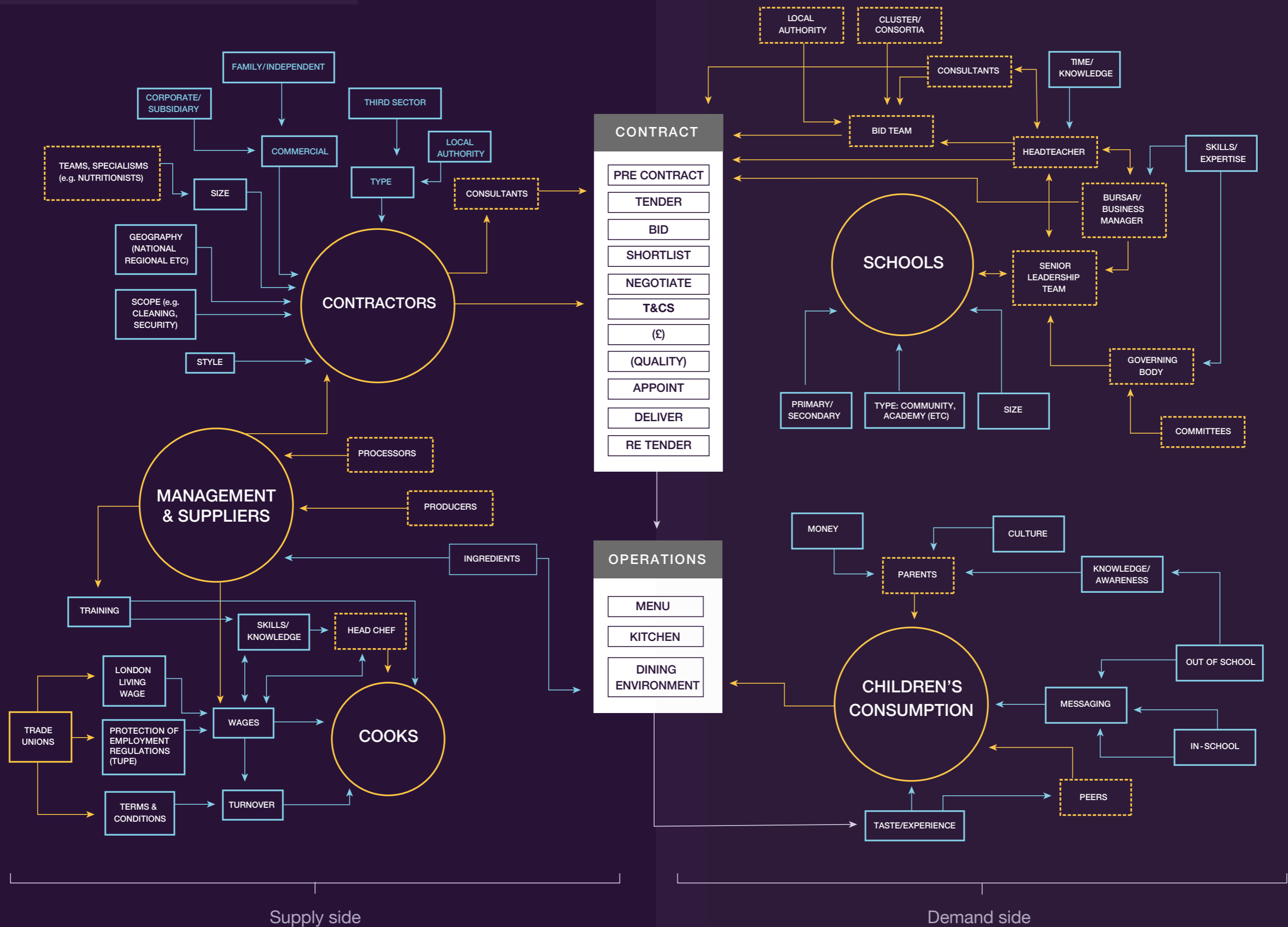
FACTORS INFLUENCING THE BEHAVIOUR

Direction of influence

↔ TWO WAY INFLUENCE

→ ONE WAY INFLUENCE

ACTORS IN THE SYSTEM



Supply side

Demand side

Providers

In many parts of the UK, there has been a gradual move from local authorities providing school lunches, to a fragmented system of provision by a mixture of in-house kitchen teams and external catering companies of various sizes. Nationally, around 50% of school lunches are made in-house or directly managed by the Local Authority, with the other 50% contracted out to external caterers. At the schools visited by reviewers, 30% had food provided by in-house cooks, employed directly by the school. **The remaining 70% were catered for by one of the many external for-profit providers. The picture that emerges is of a highly fragmented school catering market with multiple providers and variable quality in terms of the food that ends up on children's plates. Our research shows that in-house teams or external caterers have the potential to ensure children eat nutritious food, as long as this is made a priority by the headteacher, caterer and kitchen team.**



This is why proper monitoring of school food is crucial, to ensure that nutrition is a catering provider's first concern rather than the food served up being just an exercise in procurement, cost control, or efficiency. Healthy school food must be prioritised by school senior leadership, rather than seen as an issue of risk mitigation. If this is to become a reality, schools need to be supported to have adequate capability and capacity, to both procure a nutritious food service, and manage it on an ongoing basis.

The employees cooking and serving in the school kitchen are critical to the quality of food

served. The way that they are valued and managed by catering companies and school leaders can determine the extent to which they deliver nutritious, tasty meals. Continual professional development is something reviewers rarely encountered in in-house or contract catered kitchens, despite it being as important for cooks as it is in any profession. In for-profit catering companies, this is likely to be because outsourcing is already a cost reduction measure and investing in people is expensive, although reviewers did not find evidence that in-house schools were investing any more in their kitchen staff. This contributes to a sense of disillusionment among more

experienced school cooks, especially those who have to continually change caterers, and feel ground down by the lack of autonomy allowed by head office. **Reviewers also encountered high numbers of kitchen staff with minimal training and a heavy reliance on pre-prepared frozen food that is high in fat and salt.**

Reviewers saw some staff taking great pride in their work, sourcing local ingredients and serving excellent food, including both in-house and outside caterers going the extra mile **to provide great food and service.** However, the food being provided by both contract caterers and in-house teams in many schools was not up

to standard. Reviewers found no clear correlation between size or type of catering provider and the quality of food, with the same contractor able to deliver excellent food in one school and poor food in another. **This highlights the lack of structural incentives or regulation in this market for providers to prioritise nutrition. Similarly, examples of high quality, tasty and nutritious food was almost always reliant on exceptionalism – a particularly passionate Head Teacher, an especially engaged and motivated catering team – and rarely the result of clear policies, guidance or well-functioning structures.**

Cases in which good food provision was achieved by an outsourced caterer were down to a very committed school business manager or headteacher working closely with the caterer to negotiate and manage the contract

Some of the cases in which good food provision was achieved by an outsourced caterer were down to a very committed school business manager or headteacher working closely with the provider to negotiate and manage the contract. **One effective feature of**

these relationships, which keeps caterers on their toes and prevents standards dropping, is keeping contract lengths short - typically one or two years, compared to the usual three to five years. These were often schools with a clear vision for their food culture, underpinned by a well-constructed food policy. Though there can appear to be benefits to longer contracts, including contractors investing in kitchens in return for security, these are usually outweighed by the school's eventual spend and loss of negotiating power.

One effective feature of these relationships, which keeps caterers on their toes and prevents standards dropping, is keeping contract lengths short - typically one or two years, compared to the usual three to five years

The same good provision was achieved where a competent in-house cook was well managed by their school. However, where catering teams were not trained, supported or invested in, in-house cooks had understandably lost motivation. In turn, the food on offer had become significantly less attractive, creating more food waste and compromising children's nutrition. To compound this, **school meal funding has not risen in line with inflation, and kitchen staff are often paid less than the Living Wage.²**

School meal funding has not risen in line with inflation, and kitchen staff are often paid less than the Living Wage

A trend observed was for catering companies to use School Food Standards menu compliance as a key selling point and marker of success,

rather than a minimum standard for the food actually served and consumed. Reviewers also observed groups of schools bringing in one of a number of 'expert' consultants to assure them of their compliance to the School Food Standards and health and safety regulations. However, it was felt by the reviewers that consultants of this nature on the most part offered little or no value in terms of improving the quality or healthiness of the food on offer, and were a drain on already stretched budgets. In order for schools to stop reverting to consultancies to manage catering contracts there needs to be better support and best practice guidance at a local authority and national level. This will give schools the knowledge and confidence they need to manage catering providers and contracts themselves.

As well as support managing contracts, schools would also benefit from clear guidance to improve procurement, especially setting appropriate standards and targets. There is a clear opportunity for the Department for Education to play a crucial role and reissue new guidance that, includes key performance indicators for schools and caterers to assess contract performance against.

WHERE NEXT?

School leaders need greater support from national and local government to help them secure, manage and monitor good catering provision. In practice this means support with procurement tenders that write in required and desired standards around food quality, catering staff remuneration and training, and effective key performance indicators. This will help schools and catering teams monitor ongoing performance.

Stretched budgets that do not allow proper remuneration of kitchen staff, let alone money to invest in skills development, are unlikely to deliver the results that children and young people deserve. We encourage schools, caterers and local authorities to make sure kitchen employees are paid the real Living Wage as a minimum and have access to equivalent development opportunities to other school staff. Without stronger incentives to prioritise nutrition, even highly experienced catering companies with the potential to invest in innovative ways to make healthy food tasty and desirable to children, will not do so



2. The Living Wage, set by the Living Wage Foundation, is £10.75/hour in London and £9.30 elsewhere in the UK. This should not be confused with the National Living Wage, a lower rate which is the legal minimum wage for workers aged over 25.



School mealtimes

Breakfasts

A good breakfast makes a huge difference to children. Magic Breakfast are a key delivery partner for The National School Breakfasts Programme, providing a regular breakfast to 48,000 children. An [evaluation](#) of schools with a universal Magic Breakfast provision, published in 2016 by The Education Endowment Foundation in collaboration with the Institute for Fiscal Studies, found that breakfast club provision in school is a crucial lifeline to those children growing up in households with a low income. While lots of pupils would not have breakfast at all if it weren't for free options at (mostly primary) school, our review finds that in school breakfast clubs are often run on a shoestring budget and in many cases are providing high-fat, high-sugar items. A balanced nutritious breakfast should be available to all young people who need one, no matter where they go to school, and breakfast provision needs to be expanded and adequately funded to achieve this. In the short to medium term this means ensuring that all children from families on Universal Credit or with no recourse to public funds receive a healthy school breakfast every day. Longer term we hope this can be expanded to become a universal offer, accessible to any child.

Our research found that schools are often unaware that breakfasts must be School Food Standards-compliant, and that as such, breakfast can reduce the overall quality of pupils' diets. In many of the schools visited by reviewers, the food offered at breakfast included sugary cereals, jam, white bagels and white bread, as well as squash or milkshakes. In a few schools, reviewers saw chocolate-based cereals and croissants. Breakfast clubs are typically paid for out of the school's already squeezed budget and are usually run by teaching assistants who are unlikely to have specific training around balanced

breakfasts. **Standardised guidance for schools and breakfast providers on what constitutes a nutritious breakfast for pupils of primary or secondary age would go some way to ensuring breakfast clubs meet the School Food Standards and make sure children get a healthy start to their day.**

One example from a visit to a secondary school breakfast club demonstrates how willing young people are to accept healthy options, especially when they're free or cheaper than alternatives. The majority of boys having breakfast grabbed sausages to eat on the go, as this was an easy option. When

those sausages ran out, other pupils happily took a fruit option instead. Plans to remove unhealthy food items from schools are sometimes opposed by those who think it means children will rather go hungry than eat a healthier option. This and several other examples seen by our reviewers show that this is unlikely to be the case.

This review found that breakfast is a blind spot for many schools

This review found that breakfast is a blind spot for many schools, with little awareness among senior leadership teams of what food is provided,



or that it needs to be School Food Standards-compliant. Nonetheless, there are examples of nutritious breakfast clubs, providing a good selection of low-sugar cereal, fruit and wholemeal toast with spreads. At one secondary school reviewers visited, 200 children regularly enjoy a free daily bowl of porridge.

Thanks to the unhealthy but cost-effective items on offer, secondary school breakfasts are often far from Standards-compliant. More senior leadership team oversight of breakfast, and better training and guidance for those running breakfast clubs/canteen provision would help remedy this. However, there is

currently a financial barrier to all young people being able to access a free, nutritious breakfast at school.

With some schools unable to afford the cost of running a breakfast club, the result is children being more likely to start their school day hungry

Breakfast clubs are often run at a significant cost to a school - even where food is supplied for free - schools have to pay staff to run the clubs. With some schools unable to afford that cost, the unavoidable result is children being more likely to

start their school day hungry, and less likely to be able to learn, play and be healthy. **Greater financial support and government commitment to provide healthy school breakfasts at all schools, but particularly those with high pupil premium numbers is urgently needed.** The government's National Schools Breakfast Programme currently supports an estimated 280,000 children, c. 3% of England's pupil population. The latest research from [Magic Breakfast](#) suggests around 2.2 million children would pass the need threshold for a free breakfast, so the current offer reaches a fraction of the young people who need it.

Examples of school breakfasts, collected by Cookwise

✗ Example of bad practice ✓ Example of good practice



✗ Hot food breakfast offer



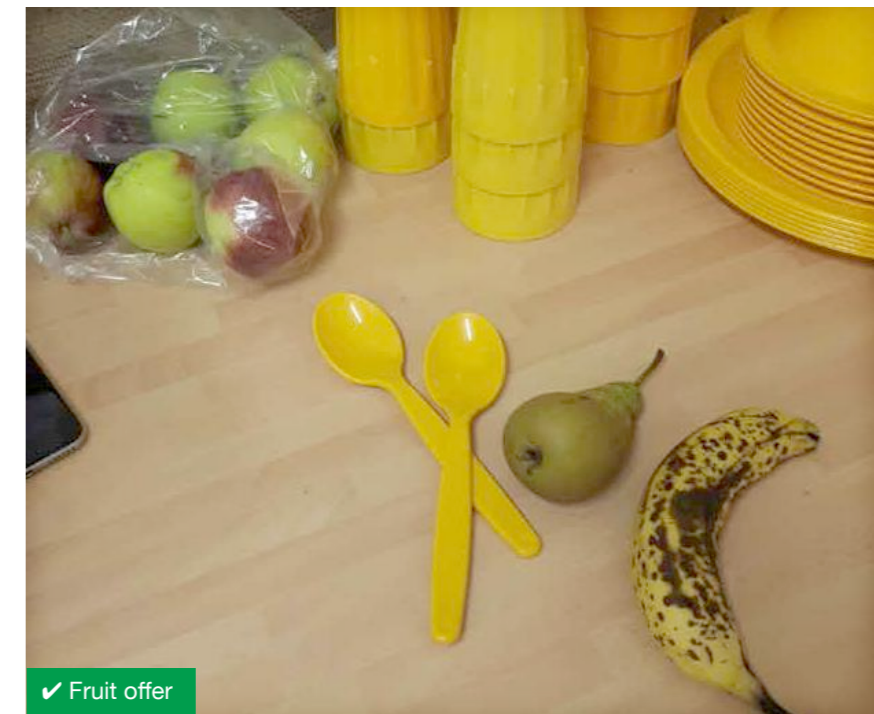
✓ Wide range of breakfast items



✗ Range of Chocolate based cereal



✓ Porridge



✓ Fruit offer

Break time at secondary schools

Break time at secondary schools can be extremely busy - large numbers of young people want to grab a quick snack in a short space of time, with the kitchen's lunch preparation in full swing. The offer at break is often dominated by unhealthy items which are easy to prepare and likely to have high-profit margins for caterers. As with breakfast, schools are often not aware that break time food is covered by School Food Standards, and the food served in this period can significantly reduce the overall nutritional quality of pupils' diets each day.

At the majority of secondary schools reviewed, the break time offer was carbohydrate-heavy with baked goods such as pizza, burgers, toasted sandwiches, sausage rolls, chicken nuggets or wings, cookies and pastries. High in sugar, fat and salt, these are very cheap items to stock. At 60% of the secondaries reviewed, the food on offer at break times would fail to meet School Food Standards. Even at those schools where healthier options were available, they still sat alongside a raft of non-School Food Standards-compliant items.

At 60%
of the secondaries reviewed, the break time offer would fail to meet School Food Standards

There were exceptions to this. One large school reviewed provides a free piece of fruit for all students and staff members at break. While this is done at a cost to the school of £35 per day, the benefits for both student and staff health are likely to be substantial. This equals an additional 190 pieces of fruit per year per student and is likely to replace healthier, higher calorie options they might otherwise grab for convenience.

Young people will consume healthy options, especially when they're free or cheaper than alternatives

At another school, strict rules were in place preventing any snack food from being brought on site if it contained more than 100 calories. This is in line with Public Health England's '100 calorie snacks, two a day max' guidance which aims to limit sugary, calorific snacks being the go-to option for children and young people.

We are concerned about the broader effect of unhealthy break time provision in secondary schools. Elsewhere, our work has found that many secondary school pupils skip breakfast, eat a significant amount of unhealthy calories at break time then skip lunch. This skews nutritional intake for the whole day, especially as pupils who don't eat lunch often go on to consume additional high fat, sugar and salt-based foods from a takeaway or convenience store directly after school.

The effect of unhealthy break time provision in secondaries can be significant on pupil diet

WHERE NEXT?

Secondary schools should be incentivised and empowered to challenge their caterer on School Food Standards compliance, and ask that exclusively healthier options be made available for break times. Given the short timeframe allowed at break, keeping the selections limited to fruit, yoghurts, wholegrain bagels and free water should be encouraged. Secondary schools could also consider prioritising and extending lunch periods to put the onus back on consuming a balanced meal at lunchtime



Examples of school food at break time, collected by Cookwise

✗ Example of bad practice ✓ Example of good practice



✓ Fresh Fruit



✗ Croissant, bacon sandwich & cheese toasties



✗ Wrap with hash brown, cheese slice & bacon



✗ Chicken wings, pizza, sausage rolls & burgers



✗ Fruit winders & mini cheddars

Hydration in schools

Pupils need to keep hydrated throughout the day, and most of that should come from water (and milk for primary aged children). Several schools have policies banning sugary and energy drinks, but these are sometimes unenforced.

We are unequivocal supporters of schools going water-only, supported by a school-wide policy and adequate access to water fountains. While COVID-19 brings new logistical challenges, we still expect schools to make free water accessible to all pupils. This is a simple measure, which would reduce plastic waste, and improve health outcomes for children and young people – but with high profit margins on bottled water and other drinks how can we make sure schools and caterers prioritise health?

Many of the schools visited were doing a good job of making tap water readily available both in the dining room and in other locations across the school, and using posters or other means to promote the importance of good hydration. One primary school had an attractive fruit-infused water station, providing a drink that is tastier than plain water but without additional calories.

29%
of primary schools offer squash at breakfast clubs

It was disappointing that many of the secondary schools reviewed were selling a large quantity of bottled water, despite tap water being freely available. Some secondary schools visited had made a clear effort to sell a range of School Food Standards-compliant, lower-sugar soft drinks, rather than healthier varieties. Most had banned energy drinks outright.

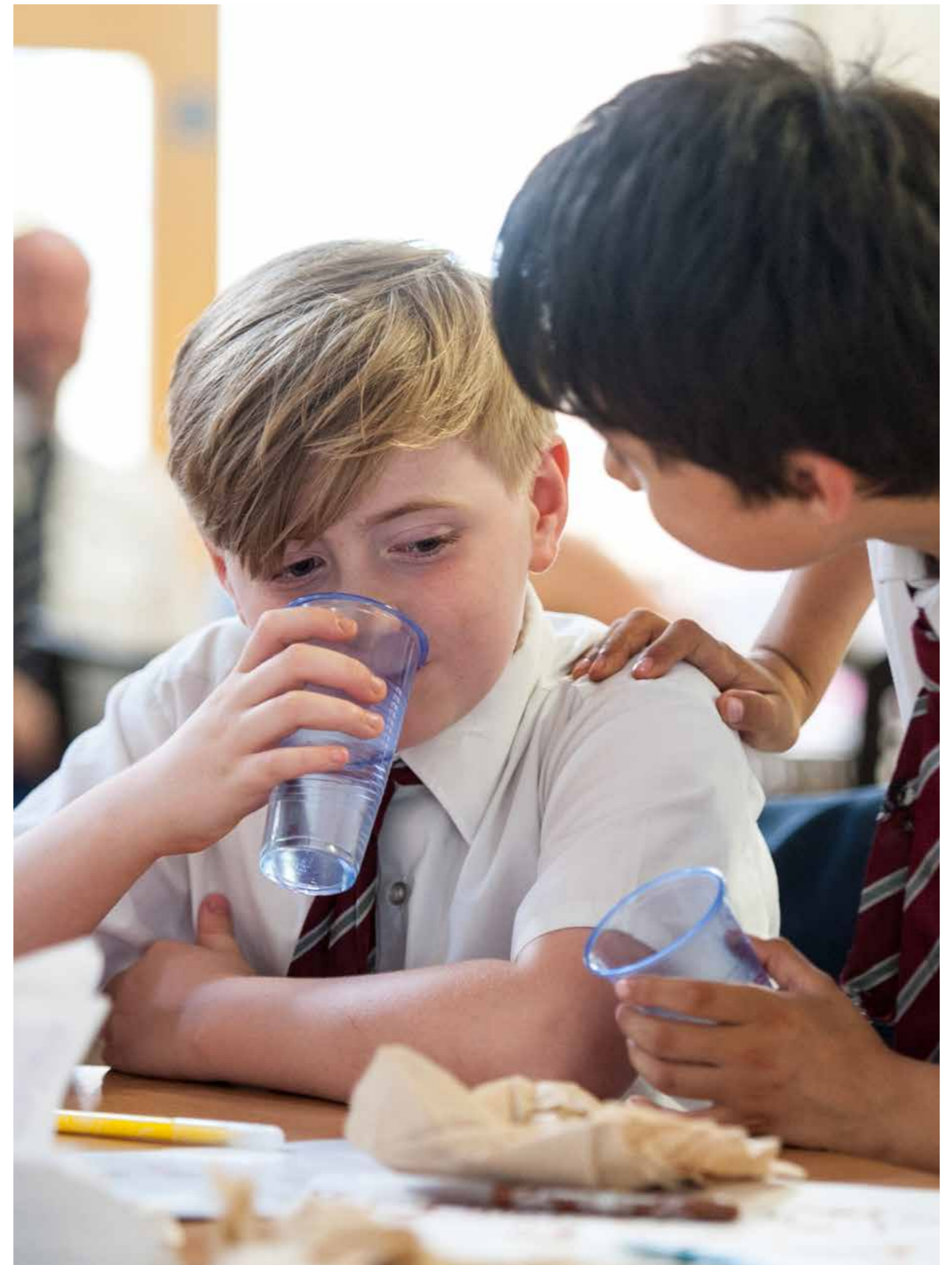
With the potential loss of profit from selling drinks, particularly bottled water, it's important that schools are incentivised to reduce waste and plastic use.

A number of primary school children had soft drinks in packed lunches, with staff often not flagging these as a concern, despite the fact that they are not compliant with School Food Standards. We also found that 29% of primary schools offer squash at breakfast clubs, which is also non-compliant.

There has been significant coverage of the negative effect of energy drinks and other sugary drinks on children in recent years. With schools already cutting down on their availability, this paves the way for stronger policies in schools around water-only provision via fountains, which would improve children's health and reduce single-use plastic waste.

WHERE NEXT?

Children should be encouraged to have a labelled reusable water bottle, and for all schools to go water-only, with low-fat milk an exception at primary school level. These policies may be most effective if rolled out via local authorities to schools. Mayor of London Sadiq Khan has [already backed this policy](#), and all schools should commit to being water-only



Examples of school food at break time, collected by Cookwise

✗ Example of bad practice ✓ Example of good practice



✗ Plastic bottled drinks on sale



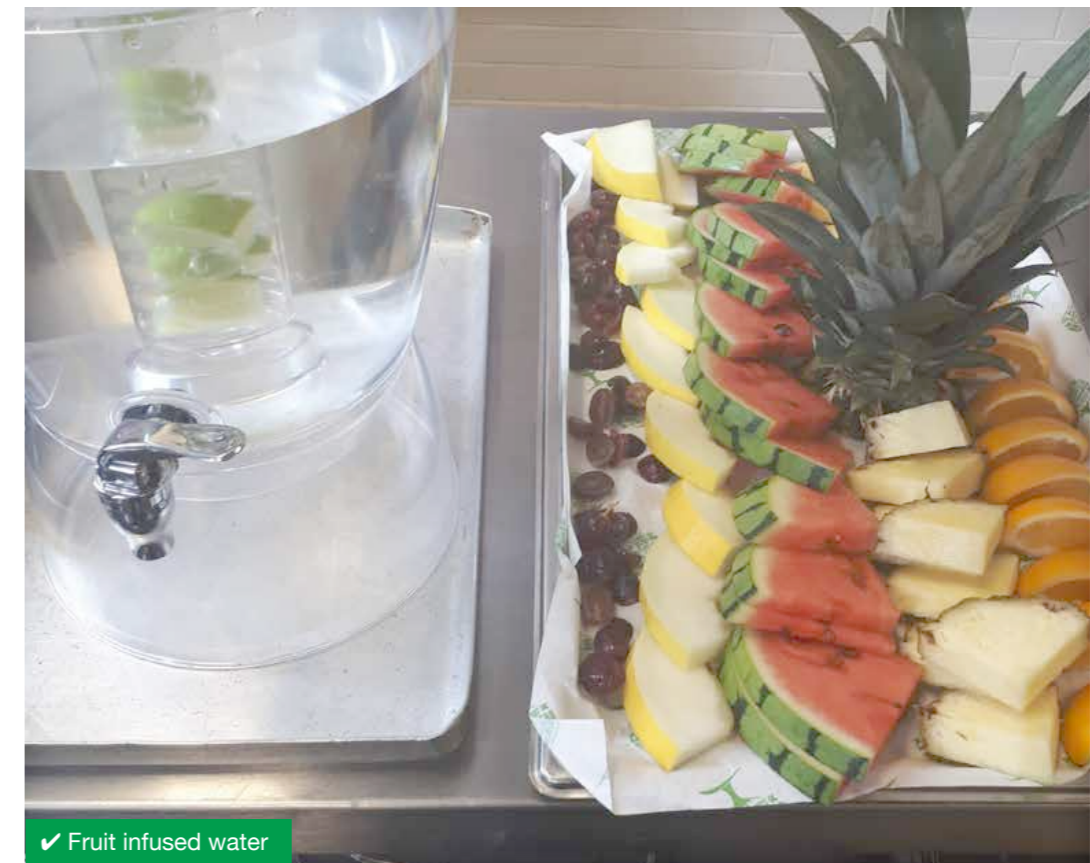
✓ Free access to water (throughout the day)



✓ Milk & water on offer



✓ Milk on offer



✓ Fruit infused water

Lunchtime

For many children - especially those on free school meals - a school lunch may be their only hot meal of the day. It is key to addressing health inequality, by giving children a chance to eat a balanced diet and the nutrients they need to learn. This is why it's so important that School Food Standards go beyond what's written on paper, and nutritious food ends up on plates.

Free School Meals

Considering the stigma felt by some children receiving free school meals, and the fact that packed lunches are rarely a healthy option (as we see in the next section), it's clear how powerful and transformative a policy of universal free school meals could be. The COVID-19 pandemic has demonstrated that Free School Meal eligibility is not an effective measure of need. Schools and charities have identified many families who would be considered ineligible but still found it very difficult to feed their children nutritious food during school closures. It's time that all young people have access to food that nourishes them, protects their health and improves their capacity to learn. We worked with School Food Matters and Chefs in Schools to deliver over half a million healthy breakfasts and lunches to young people during the school closures due to COVID-19 and summer holidays, many of whom would not have been eligible for free school meals under current regulation.

The COVID-19 pandemic has demonstrated that Free School Meal eligibility is not an effective measure of need

It's time that all young people have access to food that nourishes them, protects their health and improves their capacity to learn

Nutritional quality

While 73% of school lunch menus reviewed were theoretically School Food Standards-compliant, reviewers found that this contrasts starkly with the food children are actually eating. This seems to be because healthy, compliant options often sit alongside cheap, oven-ready or frozen items that are generally far less healthy, and require little investment in staff and resources. **As a result, children are being over-served in terms of fat, salt and sugar but are underserved vegetables and fibre, meaning lunches are not catering to their broader nutrient needs.**

Children are being over-served in terms of fat, salt and sugar but are underserved vegetables and fibre

In reality, an overwhelming majority (97%) of students generally eat the

popular but unhealthy options - pizza, sausages, burgers, BBQ chicken and wedges, food items containing no added vegetables, pulses or wholegrain. This is the case in both primary and secondary schools, though even worse in the latter. **A rewrite of menus to reflect what is actually consumed by the majority of students in most schools would be very unlikely to retain School Food Standards compliance.**

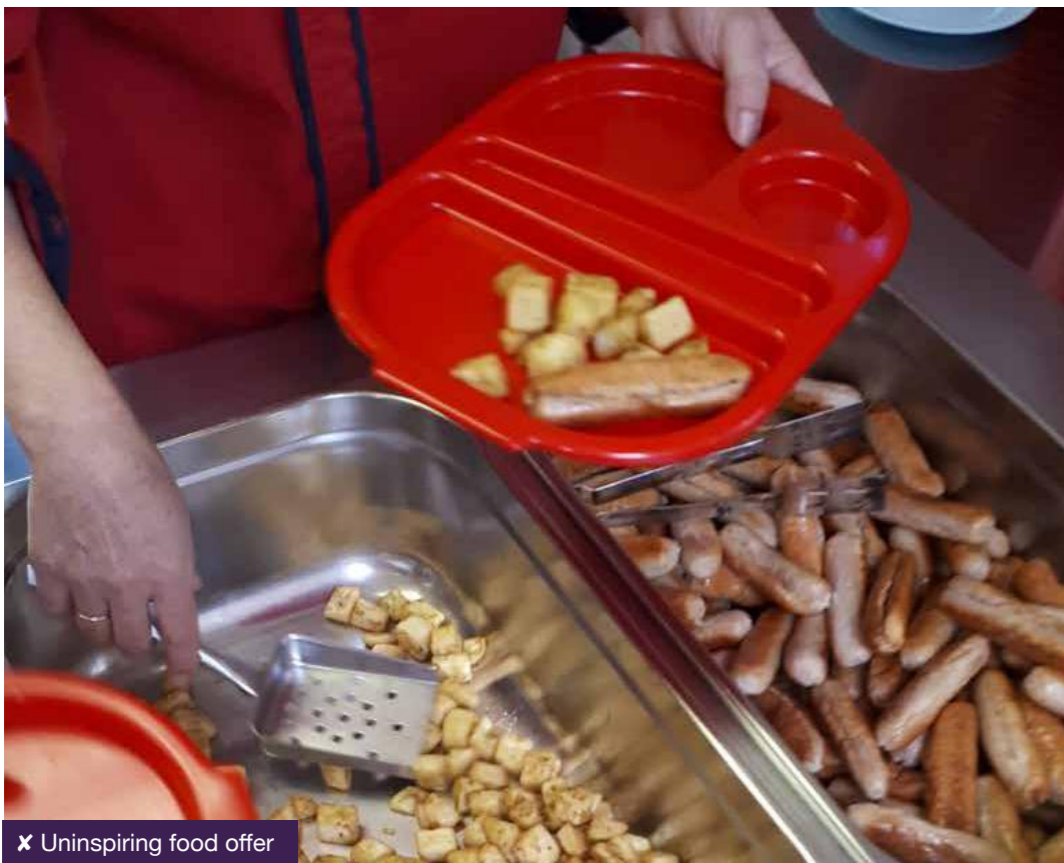
WHERE NEXT?

Reviewers also saw that half of schools visited did not have a meat-free day, and that those that did often only had one every three weeks. Meat-free days are a good way to encourage increased vegetable consumption and increase fibre intake, but reviewers found an overreliance on high fat cheese dishes and salty meat substitutes such as Quorn. This is something that could be remedied with better training for school cooks and more innovative recipe design



Examples of school food at lunchtime, collected by Cookwise

✗ Example of bad practice ✓ Example of good practice



Examples of inspiring school food at lunchtime, collected by Cookwise (continued)

✗ Example of bad practice ✓ Example of good practice



✓ Colourful salad bar



✓ Inspiring food



✓ Nicely cooked broccoli



✓ Salad bar



✓ Daily vegetables

Primary school lunches

Reviewers visiting primary schools often heard serving staff ask children “what would you like?”, allowing them to cherry-pick particular items, rather than ensuring they were serving up a balanced meal to each child. As such, many children were eating a diet consisting mainly of meat, refined white starchy carbohydrates, high sugar puddings and very few vegetables - with many healthier components of the meal either left off the plate or going straight into the bin.

Vegetables

Unbalanced plates almost always include no, or too few, cooked vegetables, which many primary pupils are reticent to eat. An effective but under-utilised way to increase vegetable consumption is to ‘smuggle’ these into sauces and stews. Around half of the unbalanced plates had too much starchy carbohydrate food. Reviewers frequently saw children choose a healthier curry or tagine option only to be given a tiny amount of the main meal and therefore sit down to a plate of plain white rice.

An effective but under-utilised way to increase vegetable consumption is to ‘smuggle’ these into sauces and stews

Reviewers were pleased to see some schools introduce rules around vegetables in an attempt to encourage consumption. One had, at the head’s behest, reinvented its salad bar to appeal to younger children. This contrasted with the many examples where vegetables were not cut in an attractive, child-friendly way or, in one case, a salad bar that included elaborate, unfamiliar salads only appealing to staff.

Portion sizes

19% of unbalanced plates were seen where the overall meal was either too large or too small. Staff were often reported to have received portion size training, but it was not clear what form this took, or that it was having an effect. More regular training for kitchen staff on appropriate portion sizes for different age groups, the introduction of portion size spoons and a clear policy around no seconds would all be welcome measures, and contribute to reduced food waste as well as increasing nutritional value of meals.

In half of the primary schools visited, children eat their lunch from flight trays. These have very little space for salad, leave children struggling to use cutlery, and mean puddings are sometimes served alongside the main meal, meaning dessert may be eaten first. **Schools should endeavour to purchase and use proper crockery for all ages.**

Schools should endeavour to purchase and use proper crockery for all ages

Puddings

It was encouraging to see that most primary schools require children to have their main meal before pudding and that a significant number serve fruit and yoghurt-only desserts for the majority of the week. This was despite teachers in various schools being entrenched in their views of the necessity of a traditional (high calorie/ sugary) dessert. However, evidence points to children being happy without these - so long as the fruit or yoghurt provided is attractive and fresh, rather than the sad-looking bowl of neglected, bruised or overripe fruit seen in some schools.

Food waste

It was very rare to observe no or minimal food waste at primary schools. **In a fifth of schools, children were throwing away nearly half of their meal, in the majority it was 10-30% of the meal. Vegetables consistently were the main item thrown away.** While it is important that these are put on a plate, it does not ensure they are eaten. Again, this highlights the significance of a ‘health through stealth’ approach, incorporating hidden vegetables or fruit into the meal’s children enjoy.

The primary school dining room

The dining room in primary schools is often a very busy place, with several hundred children passing through in an hour or less.

This review found that the number of staff in attendance was proportional to the level of chaos in the dining room. It saw schools with just two or three midday meal supervisors in the room, so stretched that they were just able to keep the area tidy and manage behaviour, with no capacity to ensure that children were eating a balanced meal or drinking enough water.

Elsewhere, teachers ate alongside pupils, creating a calmer, more congenial atmosphere, especially where they have round tables and/or family-style serving, which encourages children to pay attention to what their peers eat. While this kind of support can be particularly useful

for younger years, it is still relevant to older pupils. Many primaries reviewed know this to be the case and choose to pay for a number of teachers to eat in the dining room each day. Reviewers noted that most primary schools they visited would like to pay for staff to eat alongside pupils, but some felt they could not afford to.

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Secondary school lunches

As seen in the break time section of the report (page 26), many secondary school pupils fill up on unhealthy options at break, meaning that a balanced lunch is not always eaten. Secondary schools typically offer both hot food and a grab-and-go meal deal; this helps them to get a large number of children fed in a small amount of time.

Reviewers found that the main hot food options were mostly cooked well and were flavoursome, and takeaway options were often healthy. One school visited only served sandwiches made from brown bread and at another school, the baguettes were filled with salad as standard, though white baguettes contain less fibre than wholegrain options.

Vegetable and salad consumption fell even lower in secondary schools than in primary schools

Vegetable and salad consumption fell even lower in secondary schools than in primary schools. Young people mostly selected not to have vegetables on their plates and when they were served automatically, around 80% ended up in the bin. Salads were mostly ignored by pupils - only 20 of 650 pupils at one school took any - and catering staff said they felt it would be difficult to keep salad bars tidy, hygienic and well-stocked during busy lunch hours.

At most schools, fruit was available as an option for dessert alongside traditional puddings. Plenty of children opted to only eat a dessert at lunchtime, potentially after having had a large snack at break time. In one school where there was a meal deal available, children were collecting several portions of chocolate cake from those who did not want it.

It is clear how difficult it is for young people to compose balanced plates, particularly at secondary school, when so many tasty, convenient, less healthy options are being made available to them.

In primary schools, measures including 'smuggled vegetables', removal of flight trays, better training in portion sizes, vegetarian-only days, no-dessert days in which a healthy starter is served instead, and in secondaries, offering healthier breaktime snacks would all go some way to addressing these issues.

WHERE NEXT?

This review found that children are often perfectly happy eating healthier options at school, particularly if less healthy items are not on offer. There is a clear need for the average lunch consumed - not just the menu - to be made more nutritious. But often there is no motivation for providers to remove the convenient, profitable, high calorie options and prioritise children's health. While caterers carry all of the financial risk, there is zero incentive for health innovation. If schools and local authorities are not confident about monitoring or the type of food provision they want to see, there is even less incentive for improvement. A lunch service that has nutrition at its heart can only be achieved when there is a concerted joint commitment between schools, caterers, and local and national government to make school food a key part of the school day

Packed lunches

It can be difficult for any family, particularly those living on lower incomes, to find the affordable items and time required to make healthy, filling packed lunches every day. This review saw that packed lunches were generally far less healthy than school-made hot lunches - even when taking into account the sorts of hot lunches we've described that aren't as nutritious as they could be. This has been demonstrated most recently in research from the University of Leeds who found that the proportion of children's packed lunches that met all School Food Standards increased from 1.1% in 2006 to only 1.6% in 2016.

Free school meal provision is a key tool to provide many children with the nutritious food they deserve, but this provision doesn't reach all the children who need it, and many are left with a less nutritious packed lunch brought from home.

Given existing evidence around packed lunches, reviewers were not surprised to see that the majority were very unhealthy, full of items high in sugar, fat and salt. It was common to find a white bread sandwich accompanied by several highly processed items, marketed especially for lunchboxes, such as crisps, cheese straws and dips, yoghurts, biscuits, cakes, sweets and sugary drinks.

While there were some examples of carefully prepared brown bread sandwiches, cut up vegetables and fruit, yoghurts, or home-made leftovers such as rice or pasta, these were very much the exception.

Many schools reviewed were aware that packed lunches are often unhealthy and were taking measures to promote healthier options. Steps included sharing a packed lunch policy with parents about what should and should not be in a lunchbox, and even confiscating non School Food Standards-compliant food.

WHERE NEXT?

Creating and implementing a packed lunch policy is an important step towards establishing a culture of healthy and nutritious food in school. Longer term, we would like to see every child provided with a free meal in school - this universal offer would allow schools to ban packed lunches altogether, with only those pupils on very specific diets being allowed to bring lunch from home



Examples of packed lunches, collected by Cookwise

✗ Example of bad practice ✓ Example of good practice



✗ Crisps, chocolate & biscuits present here



✗ Waffle and crisps



✗ Iced rings, crisps and fruit



✗ Example packed lunch



✗ Doughnut & banana



✓ Sandwiches and fruit

After school

After school clubs at primary schools

The food provided at after school clubs should comply with School Food Standards but like breakfast provision, this food is often unmonitored, and/or prepared at a cost to the school by staff with little or no training in nutrition.

At primary schools, reviewers found that food offered after school was often prepared in-house by teachers or a teaching assistant and less frequently by an external caterer or sports club provider. The food varied widely from filled wraps, baked beans on toast, and cooked pasta, to lighter options such as toast and jam, biscuits, crackers, and fruit.

It was sometimes the case that food met the School Food Standards, but this was often by chance. Like with breakfast and break, many primary schools weren't aware that food served at after school clubs should comply. Some also seemed unclear about the role of food at clubs, whether it should be a light snack or full meal.

WHERE NEXT?

After school food provision should be included in school food policies. Schools need more financial support and access to appropriate resources/guidance to ensure that the food on offer is consistently nutritious, tasty and compliant with the School Food Standards



Beyond the secondary school gates

For inner city secondaries, the abundance of unhealthy food options beyond the school gates is a real challenge, and one that needs to be considered alongside this report which focuses on food within the school setting.

All of the secondary schools visited by reviewers had a stay on site policy for all but sixth form students during break and lunch, although this did not always stop sixth-formers bringing back fast food to pass on to students in younger years, even where this was specifically banned by the school.

Once the school day is done, students in inner city areas are exposed to a huge range of unhealthy fast food nearby. **All secondary schools reviewed expressed concern about the popularity and proximity of chicken shops and other fast-food outlets.** We know from research conducted with [Gehl](#), experts in urban street design, and [Shift](#), who use design to tackle social problems, that young people often go to fast food outlets primarily as a space to socialise because they have nowhere else to hang out, rather than specifically because of the food.

One secondary school that took part in our review allowed students to remain on site after school, either

in the playground or designated homework spaces, for as long as there were staff in school, generally until about 5.30pm. Food was not provided, but by allowing students to stay on site, the school reduced the likelihood of students being in environments where unhealthy food was sold, and the students appreciated having access to this safe space at the end of the school day.

WHERE NEXT?

We know that the spaces where young people spend their time between school and home are flooded with unhealthy food options. Schools that can provide a safe space to socialise can act as a healthy alternative to local fast food outlets, especially if they are able to provide a healthy snack on site



Examples of food from after school clubs, collected by Cookwise

✗ Example of bad practice ✓ Example of good practice



✗ 2nd of 2 Snacks (wrap & tuna mayo/cheese)



✗ After School club - Baked beans on white bread



✓ After School club - 1st of 2 snacks (houmus, carrots and grapes)



✗ Biscuit box offered after bread & jam snack



✓ Balanced meal (pasta & salad)



✓ After School club - Balanced meals

Where next?

This review of school food provision across an inner-city area makes it very clear that there is a significant need, and a great opportunity, to stem the tide of unhealthy food flooding our young people.

While there are examples of high-quality food being produced and enthusiastically eaten in schools, these are exceptions rather than the norm. As we have seen in this report, School Food Standards-compliant menus do not automatically translate into healthy food being consumed. The examples of good practice were achieved against the odds in a school food system that presents too many barriers to high-quality food provision, and fails to provide the financial resources, training and incentives to guarantee nutritious meals for children and young people.

As such, many children across the country eat an unhealthy, uninspiring diet at school – supplemented by a flood of unhealthy options meeting them when they leave the school gates. All young people have a right to be healthy no matter where they live, what sort of school they attend, or their family situation. And every decision-maker in the school food system has the opportunity and responsibility to shift this tide of unhealthy options.

All young people have a right to be healthy no matter where they live, what sort of school they attend, or their family situation

The present situation has not come about through purposeful neglect or disinterest; it is clear that schools and their staff are under a number of competing pressures. It is perhaps inevitable that this should lead to healthy food provision being overlooked or under-prioritised, but this only highlights the need for robust food policies, clear guidance on procurement and consistent funding mechanisms and proper monitoring. We must start with a clear vision of what healthy school food looks like, which will translate into an ambitious food specification.

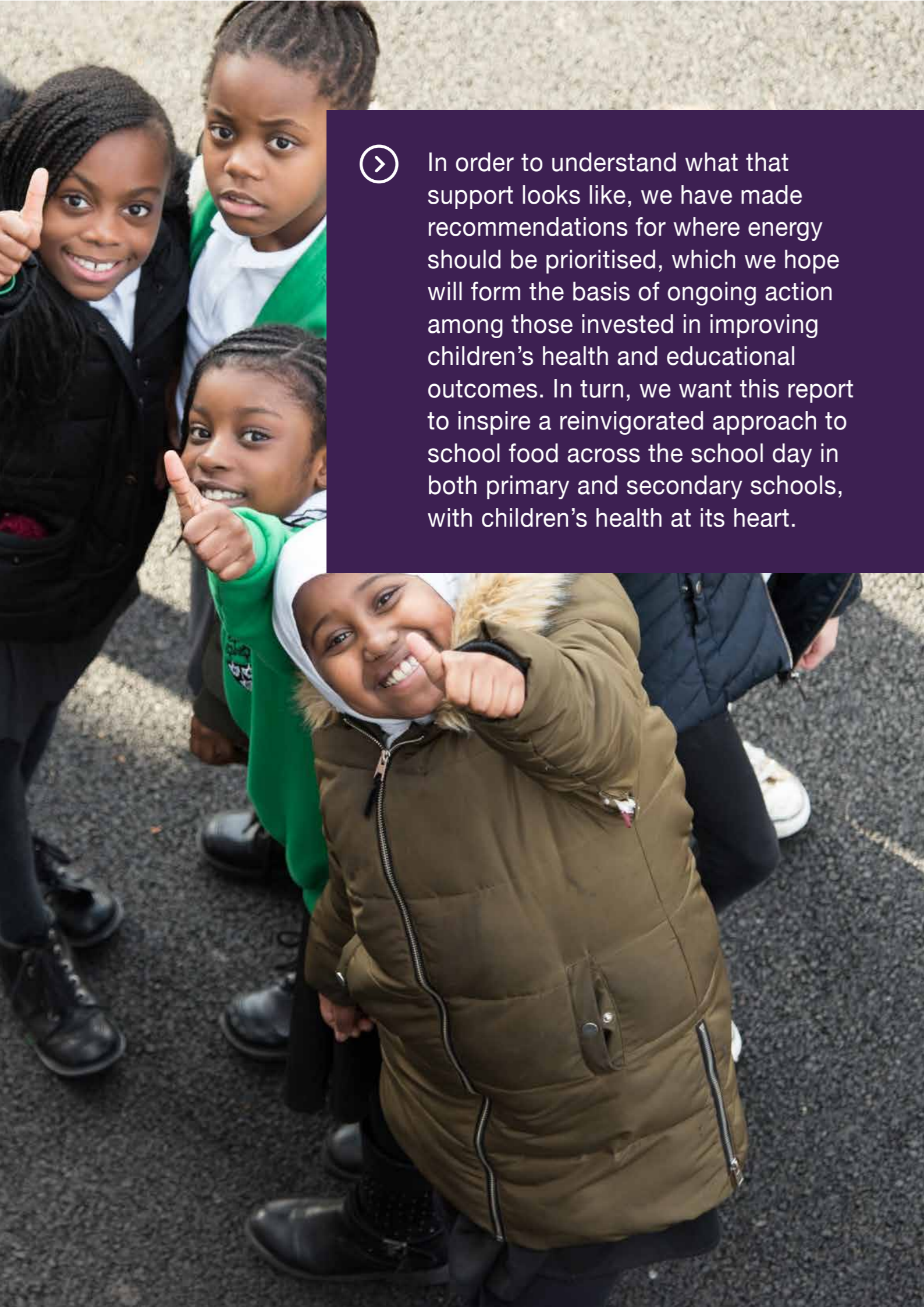
This will challenge and inspire cooks and caterers to be creative and ambitious and to get behind a shared vision for tasty and nutritious school meals. And it's essential that both local and national government provides schools with the support they need to manage this change.

We believe that children and young people deserve better. So do many others - that's why the launch of the School Food Plan in 2013, with its new School Food Standards, was met with such enthusiasm. The School Food Plan and its 17 actions was a worthy, ambitious document, but it hasn't yet achieved all its stated aims. A key action that remains outstanding is the monitoring of the practical application of the School Food Standards across the school day. Until we find a solution to this problem, compliance is likely to be patchy, and this ultimately plays out through a lack of nutritious food reaching the children and young people who need it most.

It is possible to redesign school food systems and create meals served across the school day that are not only more nutritious, but tasty and convenient too

It is possible to redesign school food systems and create meals served across the school day that are not only more nutritious, but tasty and convenient too. As we saw throughout this review, children are generally quick to accept healthier options, especially when there is buy-in and encouragement from the wider school community. If local authorities, school food charities, and Government coalesced to support this, more schools and caterers would be able to take steps to implement innovations and improve children's health.





In order to understand what that support looks like, we have made recommendations for where energy should be prioritised, which we hope will form the basis of ongoing action among those invested in improving children’s health and educational outcomes. In turn, we want this report to inspire a reinvigorated approach to school food across the school day in both primary and secondary schools, with children’s health at its heart.

Our key recommendations:

We recommend the following areas be prioritised:

Procurement and regulation

- Department for Education to adapt the school food procurement guidance so that contracts explicitly weight value towards nutritional quality of food as well as cost
- This guidance should cover food quality, finance, contract types, employee training and remuneration (including real living wage for all school catering staff), and support schools (particularly Headteachers and Governors) to source the best possible food provision

New funding mechanisms and eligibility

- Long-term we are calling for universal free breakfasts and lunches in both primary and secondary schools
- Transparent, clear and simple funding mechanisms would underpin successful delivery of national school food policies and ensure that nutritious food is being provided at school throughout the day
- Shorter term, we support the National Food Strategy recommendations to extend eligibility of Free School Meals for those children particularly at risk of health inequalities, including those from families with no recourse to public funds

Monitoring and accountability

- Department for Education and local government to put in place mechanisms that hold schools and caterers to account for meeting Schools Food Standards in practice
- Department for Education to be more transparent about the level of nutritional quality that different caterers and schools deliver per pound spent

Working together, we can realise the enormous potential of school food to make a positive impact on children’s health and wellbeing.



About Guy's and St Thomas' Charity

Guy's and St Thomas' Charity is an independent urban health foundation.

Everything we do is driven by our mission to improve the health of people in the London boroughs of Lambeth and Southwark; a place we have been based for over 500 years.

Our boroughs are exciting, vibrant places to live and work, but they also have some of the widest health inequalities in the UK. Our strong connection with our place, its people and communities, allows us to test innovative ideas, build partnerships and secure investments to help us to tackle the major health challenges affecting urban areas.

Through our programmatic approach we identify the biggest health issues for people living and working in the

communities around us, take time to understand what's underneath these issues and work with a range of partners to address them — locally, nationally and internationally. With our diverse population and stark health inequalities, Lambeth and Southwark are a mirror to the world's future population.

As a result, we take what we learn and share it with others to have a positive impact on health in urban areas around the globe.

By collaborating with others who share our drive to make things happen, and astute use of our expertise and assets, we continue to explore how we can have the greatest possible impact on the health of urban communities, for this and future generations.

Acknowledgments and Resources

Acknowledgements

Guy's and St Thomas' Charity is grateful to all the schools who responded to Cookwise during the course of research and to the London Borough of Southwark for their support in enabling the research to be carried out successfully.

Resources

- [School Food Standards](#)
- [School Food Plan resources and Headteacher checklist](#)
- [School Food Plan Alliance checklist for food provision during covid-19](#)
- [Food For Life State of the Nation report 2019](#)
- [Evaluation of universal Magic Breakfast offer](#)
- [Shift Design Families and Food research](#)
- [Gehl London Foodscapes project research](#)

Academic papers on influencing healthier eating behaviours

Hanks, A. S., Just, D. R., & Brumberg, A. (2016). Marketing vegetables in elementary school cafeterias to increase uptake. *Paediatrics*, e20151720.

Cadario, R., & Chandon, P. (2017). Which Healthy Eating Nudges Work Best? A Meta-Analysis of Behavioural Interventions in Field Experiments. (Under Review).

Madden, G. J., Price, J., & Sosa, F. A. (2017). Behavioural economic approaches to influencing children's dietary decision making at school. *Policy Insights from the Behavioural and Brain Sciences*, 4(1), 41-48.

Park, S., Sappenfield, W. M., Huang, Y., Sherry, B., & Bensyl, D. M. (2010). The impact of the availability of school vending machines on eating behaviour during lunch: the Youth Physical Activity and Nutrition Survey. *Journal of the American dietetic association*, 110(10), 1532-1536.

Evans CEL, Melia KE, Rippin HL, *et al.* A repeated cross-sectional survey assessing changes in diet and nutrient quality of English primary school children's packed lunches between 2006 and 2016. *BMJ Open* 2020





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