Department of Health & Social Care

Department for Education

Research and analysis

Updating the school food standards: feasibility pilot findings - main report

Published 29 October 2026

Applies to England

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Introduction

The Department for Education (DfE) is updating the school food standards to reflect the latest government dietary recommendations. Read more about school food standards (SFS) in England.

To help with the development and testing of new school food standards, the Department of Health and Social Care (DHSC) commissioned an independent research organisation to run a pilot project in schools. The pilot research ran during the autumn term of the 2025 to 2026 academic year. Schools were given the SFS pilot proposals during the first half of the term and were required to serve the new dishes and menus during the second half of the term.

This report and accompanying appendices set out details of the methodology followed and results obtained. They include the food standards tested and information on the surveys and interviews carried out and who with. They also summarise the findings around the feasibility of implementing the standards as well as the details of what happened when this was done. Recommendations made by the researchers on changes that could be made to the standards are also included. Details of the actual changes made ahead of the full consultation are also included.

The consultation School food standards: updating the legislative framework ran between April and June 2026.

Background to the pilot

Poor diet contributes significantly to childhood obesity and wider health inequalities in England, increasing the risk of health conditions such as cardiovascular disease, cancer and tooth decay. Data from the National Child Measurement Programme for 2024 to 2025 shows that childhood obesity rates remain high, with prevalence consistently higher in more deprived areas.

Schools are an important setting for promoting healthier eating, particularly as they provide food to children from the most disadvantaged communities. Provision of healthy food in school can help children develop positive dietary habits and influence

their food choices beyond the school environment. This has potential benefits for long-term health.

School food provision in England is governed by The Requirements for School Food Regulations 2014, which set mandatory SFS for maintained schools, academies and free schools. Schools generally comply with standards for meals served at lunchtime. However, research on school food policy in secondary schools in England suggests there is lower compliance for food served outside lunchtime, such as at morning break times. There is also lower compliance with current restrictions on serving HFSS food and drink.

In June 2025 the government committed to extending eligibility for free school meals (FSM) from September 2026. It also committed to updating the SFS to better align with current dietary recommendations. This is particularly in relation to sugar and fibre, as these recommendations have changed since the SFS were last reviewed. In response, DHSC worked with DfE to commission the research agency Verian to carry out a feasibility pilot to explore the potential effects of updated standards on schools, caterers, pupils and parents.

The pilot was designed to answer 5 main questions:

- how feasible were the updated standards to implement?
- how acceptable were the SFS pilot proposals to schools and caterers?
- how did the updated standards affect costs and food waste?
- how did the nutritional value of the updated standards compare with current provision?
- did implementing the updated standards have any unintended consequences?

Main aims of the SFS pilot proposals

The intention of many of the SFS pilot proposals was to reduce children's consumption of saturated fat, sugar and salt. Intakes of all 3 of these are above recommendations for most children. Sugar intakes in children are around double recommended levels.

High intakes of sugar and saturated fat increase the risk of weight gain and living with overweight and obesity. Children who are overweight or living with obesity are 5 times more likely to be overweight or living with obesity as adults. This increases the

risk in adulthood of heart disease, stroke, type 2 diabetes and some cancers. High intakes of sugar also increase the risk of tooth decay, which is the leading cause of hospital admissions among children aged 5 to 9 years.

Diets high in salt increase the risk of high blood pressure, which increases the risk of heart attack and stroke in adults. Lowering salt intakes reduces the risk of high blood pressure. Limiting the amount of salt added to food helps the palate to adapt to consuming a lower salt diet. If this practice starts in childhood, it has a greater chance of carrying on into adulthood.

Other standards aimed to increase intakes of fibre. Around 90% of children do not meet the fibre recommendations. The body needs fibre to help with digestion and prevent constipation, and eating enough fibre is associated with a lower risk of heart disease, stroke, type 2 diabetes and bowel cancer.

Some standards aimed to increase consumption of fruit and vegetables. The recommendation is that everyone should eat at least 5 portions of fruit and vegetables a day, although data shows children's intakes are generally below this. Eating more fruit and vegetables increases intake of fibre, vitamins and minerals, such as vitamin C, folate and potassium. Eating at least 5 portions of fruit and vegetables a day also reduces the risk of heart disease, stroke and some types of cancer.

Methods

Feasibility pilot recruitment and data collection

Verian conducted the feasibility pilot during the autumn term of the 2025 to 2026 school year. Recruitment of schools began in August 2025 and ended in October 2025. Verian recruited schools that were identified as being likely to be interested in participating in the pilot. Information on the characteristics of each school were recorded, including school type, geographical location, catering model and FSM eligibility.

Verian asked participating schools to redevelop menus in line with the SFS pilot proposals and to serve these menus for 6 weeks, during November and December 2025 (see appendix A: updated school food standards tested in the pilot). They

received no additional implementation support.

Due to variation in interpretation and perceived or actual constraints to implementation, not all standards were trialled in every school. For example, 2 schools piloted the standards for a shorter time period (2 to 3 weeks). DHSC undertook a high-level compliance check on the updated menus.

Verian used a mixed-methods approach to assess the baseline provision, changes made and effect of those changes. The baseline surveys and interviews were conducted during September and October 2025 before the changes were made to menus. The post-implementation assessment was undertaken after the conclusion of the pilot.

The mixed-methods approach included:

- separate baseline and post-pilot interviews with school leaders and caterers, unless schools requested they be interviewed together
- baseline and post-pilot surveys of parents and pupils, and 10 additional follow-up interviews with parents to increase engagement with this group
- baseline and post-pilot assessments of the nutritional value of schools' existing and updated provision
- site visits to 6 schools, including observations of pupils and interviews with caterers, pupils and parents
- collecting indicative data on food costs, uptake and waste, where available

To broaden the scope of the sample, Verian carried out 3 online supplementary in-depth interviews with caterers as well as local authority and industry representatives involved with the provision of school food but who were not participating in the pilot. The interviews explored how these groups expected the SFS pilot proposals would be received by schools and caterers if they were rolled out in their current form.

Schools received £500 for participating in the pilot. They also received £1 for every parent who completed the baseline and post-pilot surveys, up to a maximum of £150 per school.

For further details on the sampling and research methodologies used, see appendix B: additional qualitative sample information.

Nutrient analysis

Nutrient analysis compared pre-pilot and pilot menus against the school lunch nutrient framework. This framework underpins the SFS, providing details of the nutritional contribution that the average school lunch should make to a pupil's diet.

You can find more information on the nutrient framework in School food standards 2027: example menus and nutrient analysis.

To enable Verian to carry out the menu analysis, schools provided them with menus, recipes, portion sizes and information on the most popular items served. This included main meals, desserts and grab-and-go items. Follow up questions were asked where more detailed information was needed.

Recipes were analysed using a software package called Nutritics, which includes data on the nutrient content of food and drink from McCance and Widdowson's composition of foods integrated data set and data from industry. Foods not included in the data set were added and, where possible, gaps in nutrient information were filled using McCance and Widdowson data. Changes in the weight of foods during cooking were estimated using data from Nutritics. Average nutritional values were calculated for main dishes and meals including grab-and-go items as well as desserts and drinks. The assessment included the most popular items on the menu in each category. Where multiple items were popular, a weighted average was taken. Verian carried out the analysis using food portions as served rather than the amount that was eaten.

Eleven schools were included in the analysis. These covered primary, middle and secondary schools and a range of catering models. Further details are provided below. One secondary school was excluded from the Nutrient analysis due to providing insufficient data.

Limitations of the methodology

This was a small feasibility pilot conducted under constrained timelines and findings are indicative rather than representative of all schools in England.

The short lead-in time constrained menu planning and implementation, and changes

were introduced quickly rather than gradually. This reflects the design and timing of the pilot rather than how schools would normally plan and carry out menu changes.

Survey responses were voluntary and response rates varied, meaning the findings cannot be taken as representative of all groups that took part.

Data on costs, uptake, waste and recipe information provided by schools was incomplete and varied in quality.

Menus were not fully compliant with all updated standards. None of the participating schools fully implemented all the updated standards, and not all standards were trialled consistently across schools. This limits conclusions about the full effect of implementation. The findings reflect partial implementation under real-world constraints, rather than the effects of full compliance.

Piloted schools sample characteristics

A total of 12 schools were recruited to take part in the pilot, which were:

- 8 primary schools
- one middle school
- 3 secondary schools

Eleven schools completed the pilot, and 10 schools were included in the nutrient analysis. Figures are presented below for the number of schools that were included in the different parts of the research.

The school sample included a mix of:

- maintained schools - one each for community, foundation and voluntary-aided (faith)
- academies - 4 single-academy trusts and 3 multi-academy trusts
- one special school (academy or free school)

Of the different types of catering models used:

- 7 had in-house catering
- one used a charitable catering organisation

- 3 used private-sector caterers

No schools in the pilot had catering services run by the local authority.

Six of the schools had more than 30% of pupils eligible for FSM. This generally suggests that these schools serve a more disadvantaged population. Five of the schools had fewer than 30% FSM eligibility.

By location, the schools piloting the SFS changes were:

- 5 urban schools
- 3 suburban schools
- 3 rural schools

Schools were drawn from 6 regions in England:

- one from the East Midlands
- 2 from the East of England
- 2 from London
- 2 from the North East
- 2 from the South East
- 2 from the South West

The school that dropped out from the pilot before implementation was a secondary school, in a multi-academy trust. It had in-house catering, more than 30% FSM eligibility and was in an urban area in the North East.

The school that completed the pilot but was not included in the nutrient analysis was a suburban academy trust secondary school in the South East. It had in-house catering and had fewer than 30% FSM eligibility.

Implementing the updated standards

Whole-school approach

The starting point for each school strongly influenced implementation. Schools that already had a whole-school approach to food in place, which was supported by senior leadership, generally found the updated standards easier to implement. A whole-school approach to food is where a school adopts practices across the whole school day that support children to make healthy food choices. This includes offering consistency in the foods provided, the eating culture and relevant education. These schools had often:

- invested in food quality and relevant education
- worked with in-house catering teams
- already broadly aligned with elements of the updated SFS, such as offering fewer traditional desserts, limiting HFSS foods and routinely including vegetables and pulses

Smaller primary schools generally experienced a smoother implementation. Secondary schools with lower compliance to existing standards encountered more difficulties adapting to deliver the required changes.

Schools with less focus on food culture

Schools where food was less central to school culture experienced greater disruption. These schools tended to assume that the most important aspect of a meal was that it was filling, rather than its nutrient content. Some schools showed out-of-date nutrition knowledge that conflicted with the updated SFS being piloted. For caterers at these schools, menus often required extensive redesign. This included introducing new ingredients and cooking techniques.

Challenges for secondary schools

Secondary schools faced additional challenges. Limited space and timetable constraints meant many relied on ‘grab-and-go’ options. This includes foods like pre-packed sandwiches, jacket potatoes and pastry items such as pasties and sausage rolls, that are bought from the school canteen but eaten elsewhere. Baseline survey data showed most secondary school pupils mainly chose grab-and-go options, which were harder to adapt to the SFS pilot proposals.

How the catering model affected implementation

Some of the information presented in this section came from caterers who were interviewed or answered surveys for this research but were not involved in implementing the SFS pilot proposals as part of the feasibility study.

The catering model in place in each school also affected how schools implemented the SFS pilot proposals.

In-house and charitable caterers often operated small teams led by experienced cooks. Despite variable kitchen resources and limited supplier networks, they could generally adapt their provision flexibly and respond to the proposed standards.

Local authority catering was more strongly shaped by local policy objectives. It often relied on centralised production models, which limited flexibility and made it harder to tailor provision for individual schools during the pilot.

Private sector caterers had more commercial and operational capacity, which made it easier for them to implement the changes. This included having access to:

- research and development
- bulk purchasing, which reduces costs
- dedicated budgets for staff training

Where schools actively monitored compliance and treated the existing standards as mandatory, adaptation was easier. Where schools treated the existing standards as guidance, lower baseline compliance made transition to the SFS pilot proposals more difficult.

However, effective implementation was sometimes constrained by skills at school kitchen level. Like local authority caterers, private sector caterers felt that implementing the updated SFS would be easier if all schools adopted them at the same time. This would allow caterers to redevelop menus and buy new ingredients in bulk.

Feasibility of implementing the SFS pilot proposals

People involved in the pilot said the feasibility of implementing the SFS pilot proposals depended on the school's existing food culture and how compliant the school already was with the current standards. Schools that had already adopted a whole-school approach to food were generally more optimistic at the start of the pilot study and experienced smoother implementation. This was also true of schools that worked with catering providers that emphasised high-quality provision and were broadly compliant with the existing SFS. This was more common among smaller primary schools.

Other schools, particularly secondary schools, found the changes more challenging. Some of these difficulties reflected the nature and timelines of the pilot. In a small number of schools, rapid, short-term menu changes meant there were limited opportunities for staff training, supply chain adaptation and adjustment by pupils and parents. However, some challenges, such as sourcing new ingredients, were experienced across all settings.

Actual implementation generally matched expectations. The changes were better supported in schools that already had a culture of prioritising quality food, and that had already actively engaged with pupils, parents, teachers and catering staff. These schools were more accustomed to developing menus that complied with the existing SFS.

A whole-school approach was often found alongside in-house catering models and investment in skilled chefs. This gave schools greater flexibility and reduced reliance on external providers. In these schools, the chefs often had previous experience developing menus and trialling new recipes in other catering jobs, so adapting menus for the pilot was relatively routine.

Schools that had already implemented incremental changes, such as increasing fibre, incorporating pulses or improving dessert composition, also found the transition easier, since staff and pupils were familiar with these approaches.

However, a range of operational constraints meant some schools found it more difficult to implement the menu changes.

Some caterers, particularly those operating under private contracts, reported limited skills and knowledge among kitchen staff. This raised concerns about their ability to produce meals that complied with the updated standards and appealed to pupils. It also highlighted a potential need for additional training and funding.

Physical constraints, including limited kitchen space and equipment, further restricted schools' ability to prepare certain items from scratch. There were also

procurement difficulties, with some schools unable to source some ingredients such as reduced-fat cheese or higher-fibre products that would have helped their menus comply with the standards. However, schools thought that these issues would lessen over time as supply chains adapt.

Schools that relied on grab-and-go provision, mostly secondary schools, faced substantial challenges in meeting the standards, particularly in reducing cheese content and incorporating vegetables into grab-and-go options. In some cases, schools removed non-compliant items without providing suitable replacements. This contributed to concerns that it was more difficult to implement the SFS pilot proposals and increased dissatisfaction among pupils and parents. However, many schools thought that these challenges could be addressed over time through further menu development.

There is information in the ‘standard-by-standard’ section below about the changes made to the SFS pilot proposals to improve the feasibility of implementation.

Acceptability of the SFS pilot proposals and menus

People involved in the pilot widely agreed that the current SFS required reviewing and updating, and that the proposed changes would improve diets.

Some schools and caterers thought that the updated standards could go further - for example, by reducing meat consumption more than proposed. Others supported the updates despite concerns about initial pupil acceptability and were optimistic that acceptance would improve over time.

Overall, acceptability of the updated school menus was mixed.

Schools with a whole-school approach to food

Schools with a whole-school approach to food were generally more optimistic about implementing the SFS pilot proposals. Based on previous experience, they expected pupil acceptance to change over time through education and gradual exposure to new foods.

These schools invested in food education and engagement. Some involved catering staff and parents, which helped pupils to understand and engage with new foods. Protecting lunchtimes as a calm, social part of the school day also supported pupils to try unfamiliar items. In contrast, other schools viewed pupil preferences as more fixed and shaped by wider cultural influences.

Parents' feedback was similarly varied. Some welcomed the healthier menus, with others being pleased that they aligned better with eating habits at home. Others reported initial resistance or disliking the changes from their children, but they expected this to lessen over time.

Schools with previous experience of introducing healthier food reported smoother transitions and higher overall acceptance. Lower acceptability was often associated with complaints from pupils and parents, or pupils refusing food and not eating meals, particularly for higher-fibre food, or pulses and oily fish.

Survey findings

Survey findings reflected this mixed picture. On average, parents' satisfaction with school meals decreased following the pilot, although there was an increase in parents reporting the availability of healthy and balanced options. In some schools, pupils also became less engaged with the school lunch offer.

The survey findings should not be considered fully representative because they were voluntary and the response rate was low in some schools. The decrease in satisfaction was mainly caused by a small number of schools, including one that stopped the pilot early. People who completed the survey may have felt particularly strongly about the pilot menus. However, equal numbers of schools reported no change in satisfaction or an increase in dissatisfaction.

Operational effects

A minority of schools reported operational effects. This included increased complaints from pupils and parents, staff stress and increased food waste. These operational effects, together with other issues, led to 2 schools withdrawing from the pilot.

In total, 5 participating schools experienced reduced meal uptake, while schools with a whole-school approach to food reported an increase in uptake (2 schools) or no change in uptake (4 schools).

What supported acceptability

Active encouragement helped to further support acceptability. In primary schools, teachers and catering staff in the dining hall could encourage pupils to try new foods. In secondary schools, acceptability was higher when pupils had more choice and autonomy. Examples included:

- allowing choice between 2 options, such as offering different types of vegetables
- using student councils to try new food items and provide feedback
- offering self-serve salad bars with the option to try small amounts of unfamiliar items

Variations in kitchen staff skills and experience was also a factor. More highly skilled chefs were better able to adapt recipes, integrate unfamiliar ingredients into menus and make new dishes appealing and palatable, including by subtly incorporating ingredients such as pulses.

What reduced acceptability

Lower acceptability was often linked to expectations about what school food should look like, particularly where changes conflicted with familiar or what were considered to be traditional nutritious foods. Confusion about the health reasons for restrictions on items such as cheese, ham and fruit juice also reduced acceptance among some pupils and parents.

The short pilot timeframe also undermined acceptability. The timeframe gave limited opportunity to introduce new dishes gradually or refine recipes over time. This was particularly challenging in secondary schools. Reliance on grab-and-go provision made it difficult to develop portable, compliant options that pupils wanted to eat.

In some schools, acceptability was undermined by the removal of familiar options, particularly for pupils with sensory sensitivities or limited food preferences. In these cases, some pupils chose not to eat at all, reinforcing concerns among schools and

caterers about balancing compliance with meeting pupils' needs.

Some schools routinely provided extra options for pupils with sensory issues or who only ate a limited range of foods. This included jacket potatoes, paninis and sandwiches with cheese or ham. This provision, alongside the updated menu, meant these pupils continued to have something to eat.

There is information in the 'standard-by-standard' section below on the changes made to the SFS pilot proposals to improve acceptability.

Effect of the updated standards on costs, uptake and waste

Costs

Food costs increased in some schools, by between £0.06 and £0.20 per meal. The schools that reported higher food costs were also the schools that piloted multiple standards at once. Some caterers raised concerns about financial viability where reduced sales of products with a higher mark-up limited their ability to subsidise the cost of products that were more expensive to buy in.

Cost increases were mainly associated with:

- switching to higher-fibre or brown bread, rice and pasta
- switching to reduced-fat cheese
- switching to low-fat, low-sugar yoghurt without sweeteners
- replacing traditional desserts, cakes and biscuits with yoghurts and with a wider variety and number of fruit portions

However, caterers generally expected ingredient costs to reduce over time if demand increased following a national rollout.

A small number of schools reported that the costs had been manageable. These tended to be in-house caterers or caterers working as part of a charity. These caterers did not need to factor profit margins into their budgets.

Staff costs rose in some settings due to:

- additional training for staff
- increased labour associated with producing new items (for example, making sauces from scratch with pulses blended in)
- implementing different packaging or labelling (for example, to accommodate the need for a portion of vegetables or salad to be served with grab-and-go options)

There were also difficulties for staff in some schools in preparing more types and portions of fruit.

Caterers thought that some staff costs around packaging may decrease as providers adapt to new market demand. However, other staff costs incurred from increased preparation time may not decrease as quickly.

Information is provided below on the changes that were made to the SFS pilot proposals to remove the impact on costs.

There is information in the ‘standard-by-standard’ section below about the changes made to the SFS pilot proposals to reduce the effect on costs.

Uptake

The effect on uptake of meals served during the pilot varied between schools. Four schools reported no change, and a further 2 caterers reported an increase in uptake. Schools with high baseline uptake and a whole-school approach to food were most likely to maintain participation. One school where meal uptake remained constant decided not to highlight the change in pasta from white to wholemeal as they were concerned this would put parents off.

Five caterers reported declines in uptake. One primary school caterer found that after an initial 19% drop in uptake in the first week, the volume returned to baseline levels within 7 days. Another primary school caterer said that the uptake of school meals was 73% before the pilot and 67% after. A third said that there was a 15% reduction in school dinner bookings. One secondary school reported that overall sales dropped, but no change had been seen in the proportion of FSM uptake.

One secondary school reported uptake had fallen by about 40% in the pilot. This was mainly due to reduced sales of grab-and-go items, which accounted for around

80% of sales at baseline, and bottled drinks. The grab-and-go offer generally did not comply with the SFS pilot proposals, meaning most items were removed from sale. The caterers did not replace these as they said they were unable to develop and produce new items in time for the pilot. This meant pupils were required to buy plated meals instead. They suggested they would probably be able to replace items if the updated SFS were fully rolled out, although they did not expect replacements to be as popular as the current offer.

There is information in the 'standard-by-standard' section below about the changes made to the SFS pilot proposals to reduce the effect on uptake of meals.

Food waste

Schools found it difficult to measure the amount of food waste produced as a result of the changes to the menu. This arose because pupils did not always eat in a single designated space, meaning waste was dispersed across bins throughout the school. Where data was provided, it was mostly qualitative information only on how food waste changed over the period of the pilot.

While some schools and caterers anticipated increased food waste ahead of the pilot starting, particularly where acceptability was expected to be low, actual experiences varied. Of the 7 schools or caterers who provided information on food waste:

- 3 reported an increase in food waste, with one of these saying this was higher on beans and pulses day
- one measured less waste
- one saw no change, apart from maybe on the day oily fish was served
- one saw significantly higher waste at the beginning of week one, but by the end of the week waste was the same as before
- one saw the caterer reporting waste increasing over the pilot, especially on the beans-only day and for wholemeal products, with the school reporting no increase in waste but an increase in the use of packed lunches

Some schools reported higher waste of vegetables, pulses or oily fish, while fruit waste was lower than caterers had expected.

As with uptake, schools that had adopted a whole-school approach to food, or that

were otherwise closer to the updated SFS at baseline, did not report seeing any increases in food waste.

There is information below on the changes that were made to the SFS pilot proposals to reduce the effect on wastage.

There is information in the ‘standard-by-standard’ section below about the changes made to the SFS pilot proposals to reduce the effect on waste.

Overall findings

Overall, findings suggest that the effect on cost, uptake and waste was closely linked to the scale and speed of implementation, baseline practice and the catering model used within the school. Many participants emphasised the importance of longer lead-in times and additional adjustments being made to support sustainable implementation.

The nutritional value of the updated standards compared with current provision

This section sets out the pilot’s findings on the improvements and changes to the nutrient content of menus. It covers both overall findings and changes against each individual standard, when compared with baseline menus.

The pilot research showed that adopting the SFS pilot proposals resulted in clear improvements in the nutrient profile of menus, although the scale of the change varied between schools. Where menus had been improved before the pilot began, the effect was less apparent. Greater benefits were expected in schools that had made fewer changes before the pilot.

Free sugars fell overall, mainly caused by changes made to desserts and drinks. Total fat and saturated fat reduced slightly, and protein levels remained above the framework requirement.

Fibre levels doubled in grab-and-go items, where the greatest improvement was

required, and were maintained or increased in other menu options. Overall, increases were less than expected, which is likely due to the incomplete substitution to wholegrain products.

Sodium levels decreased in primary and middle schools. In secondary schools, sodium levels increased for meat-based meals but reduced for vegetarian meals and grab-and-go items. Sodium levels remained below the maximum limit set out in the nutrient framework for all menus.

In primary schools, most vitamins and minerals met or exceeded the nutrient framework in both vegetarian and non-vegetarian meals. In secondary schools, the picture was more mixed. Levels of all vitamins and minerals, except calcium, increased in grab-and-go items. The changes varied across meat and vegetarian meals for all other vitamins and minerals, although levels of riboflavin, folate and iodine increased or were maintained.

These mixed results are likely to be due to the fact that not all standards were fully implemented during the pilot. Gaps in the food composition data also limited some parts of the nutrient assessment. This related particularly to micronutrient values for plant-based proteins. Since menus used during the pilot included more plant proteins, some micronutrient levels are likely to have been underestimated.

Overall calories served at lunchtime decreased and fell below the nutrient framework in some schools. This may reflect portion-size estimation issues, as this research relied on data provided by schools. However, it also reflects reports from participants interviewed as part of the qualitative research who felt portion sizes decreased during the pilot. This was despite the SFS pilot proposals requiring no change to currently recommended portion sizes.

While nutritional quality improved overall, interpretation is subject to limitations related to partial compliance and uncertainty around portion size estimation.

For the results of the nutrient assessment of the menus, see appendix D: nutrient analysis.

Standard-by-standard feasibility, acceptability and cost

Caterers reported that the updated standards were difficult to interpret and apply.

They said the volume of standards, and how they overlapped and interacted with each other, were the main reasons for the difficulties they faced.

Caterers felt that some standards were unclear, leading to misinterpretation or unintentional non-compliance. They said the standards would benefit from clearer wording and practical examples to show what is and is not allowed in practice.

Caterers also reported limited understanding of the reasons for the changes to the standards. They suggested providing a concise, high-level rationale and outline alongside the full standards, to help them understand and implement the standards.

The issues raised in the pilot have been addressed through the changes made to the standards for the consultation. These changes are explained in the relevant sections below.

At the start of each section there is a summary of the main changes made to the SFS pilot proposals, compared with the current standards. The full set of SFS used for the pilot is provided in appendix A. At the end of each section there is a summary of the changes made to the standards after the pilot.

Starchy food

Changes to the current standards for the pilot
The main changes included in the SFS pilot proposals were:

- to use brown, wholemeal or added fibre white varieties of higher-fibre pasta and rice
- that all bread should be a source of fibre (3 grams (g) per 100g)
- that starchy foods cooked in or with fat or oil, including during manufacture, should be served on no more than 2 meal occasions each week and only as part of a meal

The purpose of this standard was to increase children’s intakes of fibre. White bread, pasta and rice generally contain lower levels of fibre than brown, wholemeal or added fibre white varieties.

Initial views on the proposed standards on starchy foods were mixed. Schools and caterers supported the aim of increasing fibre intake, but their confidence in implementation varied. Schools with a whole-school approach to food had often

introduced higher-fibre options successfully, particularly by making gradual changes supported by education for pupils. Other schools had previously withdrawn similar changes or were concerned about cost, availability and pupil acceptance.

Most caterers were able to source higher-fibre starchy foods from existing suppliers. They often did this by mixing brown and white varieties, a technique successfully used by schools that had already introduced higher fibre versions, or by offering both together. However, there was some confusion about interpreting the standards, including:

- what counted as higher-fibre white versions of foods
- whether naan and pitta breads were included in this standard
- how to monitor oil added during manufacture of products such as chips

Higher-fibre alternatives to some items, such as wraps, garlic bread and hotdog buns, were often unavailable, leading schools to continue using white versions. Where schools offered both white and brown options, uptake of white products was generally higher. Some schools, mainly those that had already introduced higher-fibre starchy foods, avoided procurement issues by making their own bread products in-house.

Caterers could usually substitute higher-fibre ingredients into their menus, although these often took longer to cook, requiring adjustments to kitchen routines. In one school, this additional burden led to staff continuing to use non-compliant garlic bread due to a lack of capacity to prepare alternatives.

Schools already serving higher-fibre starchy foods generally continued to find them acceptable, while others reported these products as being successfully introduced and accepted, particularly rice and pasta. Schools introducing these foods for the first time experienced more difficulties, especially where staff lacked the skills to adapt recipes effectively.

In some schools, particularly where staff had less experience of cooking higher-fibre items, brown pasta became soggy or congealed. Staff sometimes linked this to restrictions to adding salt or oil to the pasta water, though this issue was not reported for rice. One school reported increased complaints where communications about the pilot made pupils and parents more aware that brown varieties were being used, despite there being no previous issues with these being served.

Parents largely had a positive view of higher-fibre starchy foods including as a healthy alternative to white versions. They were generally supportive, even where children were initially resistant. Concerns were mainly raised about the cumulative

effect of the standards, particularly where children could not opt out of brown varieties.

Higher-fibre alternatives were often more expensive than white versions. This was seen as a substantial challenge in schools experiencing reduced uptake. Caterers expected costs to fall over time as demand increased, making these concerns less of a problem.

Several schools reported increased food waste, particularly where pupils were unfamiliar with higher-fibre products (notably bread items) and where the new ingredients could not be effectively disguised.

Changes to the SFS pilot proposal for the consultation
Because of the difficulties that arose with this standard during the pilot research, it was changed for the consultation on the SFS. The standard was amended to require at least 50% of pasta and rice to be brown, wholemeal or added-fibre white varieties, rather than 100%.

Fruit and vegetables

Changes to the current standards for the pilot
The new or revised SFS pilot proposals provided to schools were:

- a portion of salad or vegetables or salad must be served as an accompaniment to all main items, including grab-and-go items whenever served
- all desserts or second courses should be accompanied by or contain a portion of fruit
- at least once a week, fruit should be the only available dessert option in primary schools

It was clarified that:

- potatoes and canned pasta in tomato sauce are not included as vegetables
- fruit does not include fruit juice and that canned fruit must not be in syrup

The aim of this standard was to help increase consumption of fruit and vegetables to move children’s intakes closer to the minimum of 5 portions per day.

Potatoes and canned pasta are starchy foods which is why they do not count as

vegetables.

Fruit canned in syrup should not be provided as syrup is high in sugar. Although fruit juice contains some vitamins and minerals, it can provide large quantities of sugar. A small 150 millilitre (ml) portion of fruit juice provides around three-quarters of the recommended daily maximum intake of free sugars for primary aged children. This sugar has the same effect as the sugar in other sugary drinks, cakes, biscuits and confectionery.

There was wide agreement among schools, caterers, parents and pupils that increasing fruit and vegetable consumption was a priority. Serving vegetables with main meals was already standard in most schools and raised few concerns. Schools where vegetables had previously been optional, and secondary schools reliant on grab-and-go provision, were more concerned about feasibility and pupil response. There were also some concerns about serving fruit every day, particularly where these would replace more traditional desserts.

Primary schools generally required minimal changes, though there was some uncertainty about whether self-service salad bars met the standard, particularly where this was the main provision.

In secondary schools, the need to include vegetables with grab-and-go items led to schools providing them as side portions. Caterers asked whether vegetables could be used as a filling or topping to the grab-and-go items served. One secondary school reported that the standards had led them to rethink their entire offering and better integrate more fruit and vegetables into all their standard meal options. There was also confusion about acceptable portion sizes and about which products counted towards the standard - for example, dried fruit and fruit juice from tinned fruit.

Sourcing vegetables was straightforward, and schools generally did not change which vegetables they served. Grab-and-go items were more challenging and led caterers to cut back substantially on the number of options available.

Caterers found that fruit was easier to source than expected. There were some issues with fruit needing more time to prepare than traditional desserts and requiring different packaging.

Pupil acceptability was mixed. Vegetables were often left uneaten, particularly where choice was limited or vegetables were added directly to plated meals. Acceptability was higher where pupils could choose from a range of vegetables or were already used to self-service provision. Fruit was more popular than anticipated, with good

uptake, especially where variety was offered. Parents were very supportive of these standards, clearly understanding the health benefits of fruit and vegetables, and tended to welcome schools supporting their children to eat more of them.

Introducing fruit more often increased food and labour costs, as fruit was more expensive to buy and had a lower markup than desserts. It also required additional preparation and packaging.

Vegetable waste increased where pupils rejected these items, while fruit waste was not reported. Some schools also experienced increased packaging waste, which was partly mitigated through reusable containers, though this added to cleaning workloads.

Changes to the SFS pilot proposal for the consultation
The main challenges associated with this standard - food waste and acceptability - were particularly evident for grab-and-go items. Because of this, the standard was revised to allow one or more portions of vegetables or salad to be included within grab-and-go items, rather than only as a side portion.

Dairy and alternatives

Changes to the current standards for the pilot
The new or revised SFS pilot proposals provided to schools were:

- dairy yoghurt should contain less than 3g per 100g total fat, less than 10g per 100g total sugar and not contain non-sugar sweeteners
- plant-based yoghurts should contain less than 3g per 100g total fat and less than 7g per 100g total sugar and not contain non-sugar sweeteners
- all hard cheeses to be reduced fat
- plain, unsweetened no-added-sugar plant-based drinks that are fortified with calcium, iodine, vitamin D, riboflavin and vitamin B12 can be served

This standard focused on reducing consumption of saturated fat and sugar. Cheddar and other commonly eaten cheeses are high in saturated fat, and yoghurts can contain high levels of sugar. The standard also limits non-sugar sweeteners being present in yohgurt. This follows a precautionary recommendation from the Scientific Advisory Committee on Nutrition, which says that consumption of non-sugar sweeteners should be minimised, particularly for younger children.

Plain, unsweetened plant-based drinks were a new addition to school provision for the pilot. These drinks do not contain the same levels of vitamins and minerals as cow's milk, which is why they needed to be fortified.

Caterers expressed concerns about reducing the frequency of serving cheese, particularly in secondary schools where cheese was a vital part of grab-and-go items. There were also concerns in primary schools, where cheese was a safe and familiar option for some pupils. There were also concerns about the availability, cost and cookability of reduced-fat cheese and low-fat yoghurts, alongside confusion about which cheeses were covered.

Several schools were unable to source compliant products and did not fully trial the standards. Where reduced-fat products were used, staff generally found them easier to work with than expected, although they were more expensive than what they had bought before. Confusion was common around:

- fat thresholds - for example, what fat percentage applies to reduced-fat cheeses
- whether the reduced-fat criteria apply to cheeses other than cheddar
- how added fruit or compotes affect yoghurt's free sugar content

The nutrient analysis also revealed that the sweeteners present in some low-fat yoghurts were not always noticed by caterers.

Compliant dairy products were typically more expensive than the products caterers had bought previously, increasing costs where uptake fell. Caterers expected prices to reduce over time with increases in products available and wider rollout. The standards had little effect on food waste.

Changes to the SFS pilot proposal for the consultation
The main challenges associated with the SFS pilot proposal were higher costs for reduced fat dairy items. Some of the wording used in the standard was also difficult to interpret. To address these issues for the consultation, the requirement to use reduced fat dairy products was removed from the standards and became part of the additional, supporting guidance.

Proteins

Changes to the current standards for the pilot
The new or revised SFS pilot proposals provided to schools were:

- a portion of meat, poultry or pulses should be provided as the main protein source on 3 or more days each week
- at least once a week, all menu options should be based on pulses as the main protein source
- no more than 2 portions a week of meat and fish alternative products (manufactured or homemade), excluding plain tofu and plain soya mince

Pulses, such as beans, peas and lentils, are good alternatives to meat because they are low in fat and are a good source of fibre and protein. Children generally have limited consumption of these foods, so the aim of this standard was to make them a more accepted and more regular part of the diet. It should also help to improve intakes of saturated fat and fibre.

The standard for a serving of oily fish did not change for the pilot and is still required to be served once during a 3-week menu rotation. As well as being good sources of many vitamins and minerals, oily fish is particularly high in long-chain omega-3 fatty acids, which can help to keep hearts healthy. As with pulses, children generally have limited consumption of oily fish, so the aim of this standard is to make it a more accepted and more regular part of the diet.

Caterers generally supported a shift towards pulses for nutritional and environmental reasons. However, the requirement for a pulse-only day was widely seen as challenging and likely to be unpopular. Concerns focused on:

- staff lacking the skills to prepare appetising meals using pulses
- parents' perceptions that reducing meat could be seen as a cost-cutting measure rather than a health measure

Some confusion remained among caterers about:

- how portions were defined
- how baked beans fit into this standard
- what counted as a meat or fish alternative

Some schools already complied with these standards and continued to serve pulses and oily fish as usual. These schools had tended to comply by focusing on food education and gradually providing opportunities for pupils to try dishes containing pulses and oily fish. Other schools blended pulses into sauces or added them whole to redeveloped recipes, while oily fish was more difficult to add in.

While pulses and oily fish were readily available, many catering teams lacked

confidence and experience in preparing acceptable meals using them. These teams said they wanted additional support with this standard, in the form of recipes and training.

Pulses and oily fish were among the least popular standards piloted. Schools that had introduced pulses most successfully tended to blend pulses into a sauce to disguise them. Schools that had added whole pulses to recipes as part of the pilot tended to face the most resistance. Some parents disagreed with the requirement to serve pulses, seeing them as an unfamiliar food that their children would not recognise and not eat. However, other parents approved of these changes. These tended to be parents whose children would regularly eat pulses at home and were happy that their children were getting food that was familiar to them.

Overall food costs did not increase and sometimes fell, as pulses are cheaper than meat. However, pulse-only days were often associated with reduced uptake and increased food waste.

Changes to the SFS pilot proposal for the consultation
The proposal that beans and pulses form the main protein source for all menu options on one day a week was amended for the consultation. The amended standard allows for a portion of beans and pulses to be included within or alongside all menu options on one day a week. This change maintains the ambition to increase pupils' exposure to beans and pulses and make them more acceptable over time, while keeping this within familiar meals. It also gives caterers greater flexibility in how they incorporate beans and pulses into meals - for example, including them within a meat dish.

Foods high in fat, sugar and salt

Changes to the current standards for the pilot
The new or revised SFS pilot proposals provided to schools were:

- no more than a combined total of 2 portions per week of batter-coated or breadcrumb-coated food, food including pastry, processed meat, meat and poultry products, whether manufactured or homemade, with each type to be served no more than once per week
- no more than 2 portions of food that contain cheese each week, including macaroni cheese, paninis, toasties, jacket potato and pizza
- no deep-fried foods

- salt should not be added to water when cooking pasta, rice and other starchy foods
- fat spreads and oils must be based on rapeseed oil, olive oil or sunflower oil
- condiments provided must be reduced sugar, salt and fat (whichever combination applies, such as reduced sugar and salt for ketchup or reduced fat for mayonnaise)

The foods being limited in this standard are generally high in saturated fat and salt. The overall aim is to lower children's intakes of these. Pastry, processed meats, cheeses and fried foods are all high in fat, saturated fat and salt. Eating too much processed meat is likely to increase your risk of bowel (colorectal) cancer. Processed meat can also be high in salt, and eating too much salt can increase your risk of high blood pressure.

Spreads and oils were required to be made up of rapeseed, olive or sunflower oil. These contain much less saturated fat than butter or other dairy spreads and some oils.

The standards on desserts and drinks address the issues associated with high sugar intakes.

Secondary schools, including caterers, thought that these pilot proposals would be the most problematic to implement. HFSS items were popular, high-margin products that were central to menus, particularly grab-and-go provision. Primary schools also expected some issues, but some welcomed the standards and had already reduced the provision of HFSS foods.

In the pilot, secondary schools tended to comply by removing HFSS grab-and-go items, substantially reducing menu choice. Some schools did not fully implement the standards, due to concerns about pupil satisfaction. Primary schools generally adjusted their menus by rearranging dishes across a 3-week menu cycle or removing items, such as pizza and sausage rolls, that had previously been available daily.

Caterers reported confusion around definitions, including:

- which foods counted as HFSS
- whether processed vegetarian alternatives and plant-based cheeses could be used in place of processed meats and dairy cheeses
- whether butter was permitted in baked items, or whether it counted as HFSS

This highlighted a need for clearer guidance.

While it was feasible to remove HFSS items, secondary school caterers felt it was difficult to replace them with appealing, compliant alternatives, particularly for the grab-and-go options, raising concerns about future financial viability. Some schools also lacked the kitchen capacity or equipment to oven bake dishes instead of frying, though some staff welcomed reduced reliance on fryers.

One school raised concerns that this standard would affect the feasibility of their vegan provision, as most commercially available options they used reportedly included breadcrumbs or pastry.

Acceptability challenges were seen in primary and secondary schools but were more pronounced in secondary schools. Pupils often saw the removal of HFSS items as a loss of choice, which contributed to reduced uptake. HFSS foods were also viewed as familiar options for pupils unfamiliar with other menu items. In primary schools, pupils initially resisted changes but were more likely to adapt where baked alternatives were available.

Parents and staff questioned restrictions on cheese and processed meats such as ham. They saw these foods as traditional and nutritious and were confused about the reasons for these changes.

Schools that relied on HFSS foods saw a decline in sales. This resulted in reduced costs where previously fried products could not be replaced with baked alternatives. There was also a loss of income since HFSS foods are usually cheap for caterers to buy in but can be sold with a mark-up. Where schools removed HFSS items without replacing them, pupils generally did not switch to other options.

Some of these issues were particularly relevant to the reduced availability of cheese. Primary schools generally found it easier to reduce how often they used cheese in main meals but struggled to develop alternatives for sandwiches or jacket potato fillings. Secondary schools often responded by removing cheese-based grab-and-go items altogether, which reduced menu variety. They said they would have taken a different approach if they had had more time to develop alternative options. Pupils did not always want to eat the alternative options provided, such as tuna, and some schools saw an increase in the number of days some children brought in packed lunches. Some schools continued to provide cheese-based items selectively for pupils with sensory needs.

Food waste increased in some cases, where pupils took alternative dishes but did not eat them. Where baked alternatives replaced fried items, they remained popular

and waste levels were largely unchanged.

Changes to the SFS pilot proposal for the consultation

The reduced frequency with which cheese can be served was a particular issue in the pilot, especially since cheese is a safe and familiar option for some pupils. To address this for the consultation, the standard to not serve more than 2 portions of food that contain cheese a week was revised. The revised standard does not include food where cheese is used as an optional topping on items, such as a jacket potato. This provides additional scope for cheese to be served, but in smaller portions.

Food can be a complex issue for children with special educational needs and disabilities (SEND), sensory needs and anxiety about food. Schools should work closely with parents, carers and professionals to make appropriate adjustments where necessary.

Desserts

Changes to the current standards for the pilot

The new or revised SFS pilot proposals provided to schools were that no more than one portion of sweetened baked products and desserts (manufactured or homemade) can be served at lunchtime each week. These must contain at least 50% fruit and no confectionery or chocolate.

Traditional desserts, cakes, biscuits and other baked goods, confectionery and chocolate are usually high in sugar and saturated fat. As intakes of sugar and saturated fat exceed recommendations, this standard aimed to reduce consumption of these.

Requiring desserts to contain at least 50% fruit aimed to increase children's consumption of fruit, which is below recommendations.

Schools and caterers initially raised concerns about the required changes. They saw traditional desserts as culturally, financially and nutritionally important. They also feared negative reactions from pupils and parents. However, some primary schools had already successfully reduced how often they served traditional, sweetened desserts and welcomed a consistent approach.

Some schools had worked to develop desserts made from vegetables, rather than fruit, and were worried that they would have to stop serving these to comply with the

updated standard.

There was widespread misunderstanding and application of the 50% fruit requirement. Some schools incorrectly assumed desserts could continue to be served with a portion of fruit on the side. When analysed by nutritionists, none of the desserts served containing 50% fruit were compliant. For example, some caterers had cooked crumbles that were 50% fruit, but these became non-compliant when served with extras such as custard.

Fruit was generally easier to source than expected by caterers, but preparing it was more labour-intensive and some schools lacked capacity to offer a variety of options. This included trialling desserts with 50% fruit.

Despite initial concerns, pupil and parent acceptance was higher than had been anticipated by schools. Complaints reduced over time, and fruit uptake was high. Pupils often chose fruit or yoghurt even when uptake of main meals fell. Staff became more supportive of the changes once they saw this acceptance. There was also widespread recognition that traditional, sweetened desserts should not be served every day, as long as pupils still got enough calories.

Replacing desserts with fruit increased costs and staff time due to lower margins and preparation requirements. However, options that took extra time to prepare, like watermelon and pineapple that were included in fruit pots, proved to be popular. Caterers did not expect fruit costs to fall with increased demand. There was no evidence of increased food waste associated with this standard.

Changes to the SFS pilot proposal the consultation
For the consultation, it was proposed that for the first year the standards would be in place, secondary schools could serve no more than 2 portions of sweetened baked products and desserts per week.

After this, secondary schools will need to move to serving only one portion of sweetened baked products and desserts per week. Allowing an extra portion during the first year of the standards allows for a more gradual transition to this standard.

Meal deals

The new or revised SFS pilot proposals provided to schools were that:

- a meal deal must include at least one portion of vegetables or salad and at least

one portion of fruit

- meal deals must not include drinks

The requirement in this standard on meal deals aimed to increase consumption of fruit and vegetables to be more in line with the recommendation to eat at least 5 portions a day. Data shows that children's intakes of fruit and vegetables are generally below the recommended 5 portions.

Aligning meal deals with the SFS pilot proposals was not a priority for most schools and caterers, as other changes, notably to drinks, HFSS foods and cheese, had a greater effect on whether meal deals remained viable. Some schools felt meal deals could reinforce less healthy perceptions of what constitutes a meal, though they saw including fruit and vegetables as a nutritional improvement.

In practice, removing fruit juice and combination drinks meant many caterers stopped offering meal deals altogether, as drinks were central to existing offers. One primary school continued a packed-lunch-style alternative to support its whole-school approach to on-site meals but sought clarity on whether water could be included.

Caterers generally viewed meal deals as unworkable under the SFS pilot proposals. They assumed meal deals without drinks, cheese or HFSS items would have low appeal to pupils. Pupils or parents rarely raised the loss of meal deals, largely because other standards had already reduced the items typically included in them.

Since most schools withdrew meal deals, it was not possible to clearly identify the specific effects on cost and waste.

There were no changes to this standard for the consultation.

Drinks

Changes to the current standards for the pilot

The new or revised SFS pilot proposals provided to schools were that free, fresh drinking water must be available in the dining room and wherever food is served. The only drinks permitted are:

- water (still or carbonated) that is sugar free and contains no sweeteners
- unsweetened and lower-fat milk

- lactose-free milk
- plain, unsweetened or no-added-sugar soya and oat (and rice in secondary schools) drinks, which must be fortified with calcium, iodine, vitamin D, riboflavin and vitamin B12
- tea or coffee without additions such as syrups, sprinkles and cream (in secondary schools)

This standard mainly aims to reduce children's consumption of sugar from soft drinks. Children's intakes of sugar are generally double recommended levels.

Although fruit juice contains some vitamins and minerals, it can provide large quantities of sugar. A small 150ml portion of fruit juice provides around three-quarters of the recommended daily maximum intake of free sugars for primary aged children. This sugar has the same effect as the sugar in other sugary drinks, cakes, biscuits and confectionery.

Permitting low-fat milks also reduces consumption of saturated fat, which is generally above recommended intake levels. Plain, unsweetened plant-based drinks do not contain the same levels of vitamins and minerals as cow's milk and need to be fortified. The SFS pilot proposals were already standard practice in primary schools and raised few concerns. In secondary schools, perceptions were mixed. Caterers welcomed the potential for cost savings for families and reduced access to unhealthy options, but were concerned about:

- pupil complaints
- pupils bringing in fizzy drinks from outside school
- potential effects on profitability

There was also confusion about the health reasons for banning fruit juice, which some staff viewed as healthy.

Most primary schools were already compliant. In secondary schools, implementation was more variable. One school continued to provide combination drinks throughout the pilot, believing these were compliant due to branding. Combination drinks contain 150ml of fruit juice and have water or milk added to increase the total volume of the drink to around 330ml. There was also confusion about whether bottled water could be sold, with secondary schools tending to sell it and primary schools relying on free water provision.

Removing non-compliant drinks was generally feasible, and schools did not report concerns about stock wastage in surveys at the end of the pilot. Acceptability was

high in primary schools, with parents supportive of water-only provision. In one primary school, acceptability was lower due to unclear guidance on bottled water, leading some pupils to refuse non-bottled water.

In the secondary school that removed fruit juice and combination drinks, acceptability was low. Although water uptake increased, pupil dissatisfaction persisted even after they had accepted other changes. This was largely caused by misperceptions by parents, pupils and catering staff that fruit juices are healthy.

Lactose-intolerant and vegan pupils welcomed access to alternative milks. Secondary school caterers raised concerns about lost income, as fruit juices and combination drinks had previously generated income that was used to subsidise other, more expensive menu items.

Changes to the SFS pilot proposal for the consultation
No changes were made to the SFS pilot proposals for drinks in primary schools.

Pupils in secondary schools said the SFS pilot proposal for drinks resulted in one of the most significant changes. Given the importance of hydration and the ability of many secondary school pupils to buy food and drink off-site, the standard was amended for the consultation to include sugar-free flavoured waters and no-added-sugar fruit-flavoured drinks. These drinks must contain a maximum of 0.5g total sugar per 100ml. While this revision allows sweeteners in these drinks, the standard maintains the ambition of lower-sugar drinks in secondary schools and gives pupils more choice. The consultation also proposed that for the first year the standards are in place, the current permitted drinks list could still be served. This would allow schools to phase in the new requirements.

Non-sugar sweeteners

The new or revised SFS pilot proposals provided to schools were:

- foods and drinks containing non-sugar sweeteners must not be served in primary and secondary schools
- sugar and non-sugar sweeteners must not be available to add to food or drink after it has been cooked or prepared

There is some concern that long-term consumption of sweeteners may increase the risk of weight gain and some health conditions, such as type 2 diabetes. As a precaution, the government recommends that intakes of sweeteners should be

minimised, particularly in younger children. This standard aims to remove non-sugar sweeteners from schools.

This standard attracted limited comment, but where caterers did comment, they generally supported it, assuming they were already compliant. They also reported that implementation was straightforward.

However, nutrition analysis showed that these ingredients were more widespread than caterers realised, particularly in products such as yoghurts and baked beans. This shows a need for guidance on which food items to check.

While caterers widely accepted the principle of this standard, a lack of awareness about the presence of sweeteners in food products presented a challenge to full compliance. As use was generally unintentional, the acceptability, cost and waste implications of a fully compliant menu remain unclear.

No change was made to this standard for the consultation.

Other changes made after the pilot for the consultation on the standards: phasing in secondary schools

Secondary schools found some of the updated standards harder to implement than primary schools did, because they rely more on grab-and-go options. Caterers reported that these options were essential to catering for the larger numbers of pupils in secondary schools.

As a result, the consultation proposed that the standards that lead to the greatest change are phased in over an additional year in secondary schools. This means secondary schools will need to meet these standards by the start of the school year in September 2028, rather than September 2027.

The extra time will allow caterers, cooks and chefs to trial different ways to implement the standards through grab-and-go options. It will also help them explore how to make buying and eating school meals more convenient, while still offering pupils the familiar dishes they enjoy.

The following phasing process sets out the proposed interim standards to be met in the first year (between September 2027 and July 2028) by secondary schools.

Beans and pulses: the requirement to include a portion of beans and pulses within or alongside all menu options once a week. In the first year, this will be required once every 2 weeks.

Cheese: reducing the frequency of foods where cheese is a main ingredient to 2 portions a week. In the first year, up to 3 portions of food where cheese is a main ingredient can be served a week.

Drinks: the requirement to only serve drinks on the updated permitted drinks list. In the first year, the existing 2015 drinks standard can continue to be followed.

Sweetened baked products and desserts: the requirement that no more than one portion of sweetened baked products and desserts can be served at lunchtime each week. For the first year, no more than 2 portions can be served.

Unintended consequences

Some schools reduced the range of items available during the pilot. One secondary school significantly reduced its grab-and-go options, because of the restrictions on HFSS foods and cheese. Some pupils thought these changes left them with limited acceptable choices. In some primary schools, reduced use of cheese was also thought to narrow options, even where more varied alternatives were provided.

The menu changes highlighted several areas for consideration during implementation.

In some schools, menu variety and school lunch uptake declined during the pilot. Some pupils brought packed lunches or bought food offsite instead or occasionally skipped lunch. Staff said these alternatives could be less nutritious and were harder for schools to influence. It was also reported that some pupils eligible for FSM brought packed lunches or missed meals, which could have placed additional pressure on family budgets.

Commercial and local authority caterers were concerned that increased costs and reduced uptake of school meals could make school catering financially unsustainable. They believed this would particularly affect secondary schools, where uptake would be lower. They feared schools might switch to providers who do not comply with SFS, especially without consistent enforcement, which would undermine implementation. Sudden changes to the SFS and the implementation timescales were also thought to disproportionately affect caterers with limited kitchen capacity

or recent investment in fryers.

The pilot highlighted the value of careful, positive communication. In some cases, drawing attention to established changes that were already working well led to complaints and reduced school meal uptake. Some pupils also viewed the changes as restrictive, affecting staff morale and relationships with pupils. This shows that future communications should focus on improvements to food quality and the benefits for pupils, while avoiding unnecessary emphasis on restrictions or successful changes already in place.

Recommendations for implementing updated standards

The researchers from Verian made a number of recommendations to government based on the findings from the pilot. These are set out below.

Allow sufficient lead-in time to introduce the standards

Caterers indicated that they would need around 12 months to develop recipes and menus, buy appropriate, new ingredients and introduce changes gradually. This would make implementing the standards more feasible and help new menus to be more acceptable to pupils.

Clarify the standards and provide supporting guidance

Schools and caterers often misinterpreted or did not fully understand the SFS pilot proposals or how to implement them. Suggestions made for redrafting or changing the standards to make them easier to use and understand included:

- restructuring the standards, such as organising them by menu items or ingredients
- using clearer wording

- providing examples of compliant and non-compliant food and drink items
- providing examples of compliant menus and showing how the standards that limit how often certain ingredients are served should work
- education and training to help caterers' understanding and knowledge of the standards and how to apply them

Communicate the rationale for the changes effectively

Some standards were not well understood, particularly where they restricted what caterers thought were relatively healthy options, such as cheese, ham and fruit juice. The reasons for making the changes were also not well understood by parents.

This suggests that clear communication on the standards for schools and caterers would help them make the required changes. The communication should focus on food quality and the wider benefits of the changes and be supported by nutrition education for children in the curriculum and for parents.

Provide practical menu-development support

Some schools and caterers had trouble identifying how their menus needed to be updated to meet the SFS pilot proposals. Caterers with fewer resources, skills and staff found it more difficult to devise new, compliant recipes.

Schools and caterers would benefit from access to tools, training or services to help them audit and develop compliant dishes and menus. This would particularly address more challenging areas such as pulse-based meals and grab-and-go options.

Review financial support arrangements

Some ingredient and menu changes (such as switching to wholegrain starchy foods and reduced fat cheese) increased costs during the pilot. These changes may also increase costs in the short term as schools move towards complying with the new

standards. Since this may be a barrier to compliance, government, schools and caterers may need to consider how to review and update school food funding models.

Improve record keeping for recipes and menus

Some caterers involved in the research did not consistently record menu and recipe information. This created difficulties for them because it was not always clear how dishes and menus would need to be updated to meet the SFS pilot proposals. It may be necessary to provide training and guidance to schools and caterers on writing and recording recipe and menu information.

Strengthen compliance mechanisms

There are currently limited checks or enforcement of existing SFS, which reduces the incentive to comply. Implementing more consistent checks or inspections could ensure more consistent application of the SFS, and greater compliance overall.

Support a whole-school approach

Schools that had developed a whole-school approach to food before the pilot began found it easier to implement some of the SFS pilot proposals than those that had not done so. These schools used a variety of methods to engage the wider school community, such as involving senior leaders. They also included food-related learning in and outside timetabled lessons, and involved parents and pupils in developing menus and holding tasting sessions.

For schools that have not yet taken this approach, peer-to-peer support, guidance and case studies would increase their confidence to do so. This would likely be most helpful for schools where pupils are less likely to accept the new menus, such as secondary schools or those with a high proportion of pupils with SEND.

Conclusions

The pilot showed that the proposed SFS can improve the nutritional quality of primary and secondary school menus. Even with partial implementation, including for secondary school grab-and-go items, menus:

- contained less sugar, fat and salt
- met the nutrient framework for fibre
- provided higher levels of some vitamins and minerals

Schools broadly supported the proposals, which proved feasible and acceptable in a range of school settings. Implementation was easiest where schools had strong leadership, experienced in-house chefs or an established whole-school approach to food. School meal uptake was maintained or increased in more than half of participating schools, particularly where fewer changes were required.

The pilot identified practical factors that would make implementation easier and strengthen pupil acceptance. These included:

- providing sufficient lead-in time and introducing changes gradually
- supporting procurement and recipe development so that compliant food remains appealing to pupils
- allowing schools and caterers time to manage costs, workload and food waste while maintaining meal uptake
- clearly explaining the purpose and benefits of the changes
- engaging pupils and responding to their expectations to support continued school meal uptake

The findings show that schools can implement the standards across varied settings when they have flexibility to meet local needs, including provision for pupils receiving FSM or with sensory needs. Secondary schools may require additional support, since limited dining space increases their reliance on grab-and-go food. However, schools and caterers agreed that longer lead-in times, phased implementation and wider availability of affordable compliant products would further increase feasibility and pupil acceptance.

Evidence from the pilot informed changes to the standards before the public

consultation. The most challenging requirements were revised and schools were given more time to implement them, which strengthens the potential for the final standards to be cost neutral, reduce food waste and maintain meal uptake.

Overall, the pilot provides evidence that the updated SFS are both feasible and acceptable. Successful rollout will be supported by:

- time to introduce the required changes gradually
- clear standards and accompanying guidance
- resources and sustained support, such as integrating food education into the curriculum and upskilling catering staff

Together, these measures will help schools make lasting nutritional improvements, while maintaining pupil acceptance and school meal uptake.

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