





BACKGROUND

In 2017, we called for Scotland's policymakers and local authorities to help transform our school feeding culture into an eating culture¹. To achieve this, we made four recommendations for action, based on the findings of our review of Scottish Primary School menus.

- Use unprocessed or minimally processed foods wherever possible
- **2** Prioritise vegetables, soup and salads over puddings
- Reduce free sugar content in school meals towards those of the new Scottish Dietary Goals
- 4 Create a positive physical and social environment for school meals

In 2019, we conducted a follow-up to this review². Although there was still room for improvement – pizza and chips could be offered less frequently, more authorities could offer soup and oily fish, and more could provide nutritional information – overall, primary school meals had improved, and we were encouraged by the results. In particular, we saw less red and processed meats on menus, alongside fewer puddings. We saw more oily fish offered than in 2017, and fruit and yoghurt were more frequently offered as pudding options.

In the time between the two reviews, the Scottish Government consulted on improving school food standards and committed to introducing new regulations to make school food healthier. The changes were to include the setting of maximum limits for consumption of red processed meat, increasing the amount of fruit and vegetables served, reducing the amount of sugar available throughout the school day, and encouraging the use of fresh, local and sustainable produce³.

THE IMPACT OF COVID-19 ON SCHOOL MEALS

In March 2020, COVID-19 – the disease caused by the SARS-COV-2 novel coronavirus –was declared a global pandemic by the World Health Organization (WHO). From Friday 20th March, all schools in Scotland closed in an effort to control the spread of coronavirus.

The Scottish Government quickly set in place legislation⁴ and guidance⁵ designed to ensure that all children and young people continued to be supported during school closures. This included ensuring that those entitled to free school meals were supported with food that provided adequate nutrition, outside of the school setting.

As the initial response was required to be swift, the guidance allowed local authorities to make individual decisions on how this would be delivered locally, meaning that there was no standardised response across local authorities in Scotland: some provided support in the form of supermarket vouchers, some provided cash payments and some delivered meals or food packages. Several issues were recognised for each provision type: some of the vouchers could only be used in certain frozen food shops of which there are few in Scotland, cash payment values varied between authorities, some entailed additional costs such as transport to shops and cooking of the food⁶. By April, the Scottish Government had announced a £70 million food fund for local authorities, with £15 million of this ring-fenced for free school meal provision⁵. A cash-first approach was emphasised

in supporting guidance, identified as the most appropriate and least stigmatising approach, with the needs of entire families of children entitled to free school meals to be considered.

Due to the uncertainty brought about by coronavirus, job losses and cuts in income, the free school meals scheme was extended into the summer holidays, with the Scottish Government announcing a package of £27.6 million of additional funding⁷. By June, around 175,000 children and young people in Scotland were receiving free school meals, vouchers or cash – an increase of 53,000 since the outbreak began⁷.

The new regulations for school food standards that were due to be introduced to the Scottish Parliament in May 2020, with implementation dates of August 2020 for new drinks standards, and October 2020 for the remaining standards, had to be pushed back to allow extra time to prepare for implementation. This would allow authorities more time to engage with suppliers, pupils and parents. The new implementation date for all standards is now April 20218.

COVID-19 has affected every aspect of our lives, including our schools and school meals. At time of publication, there is little certainty of the format school meals will take in the 2020/2021 term. In this report, we take a look at the changes in primary school menus between 2019 and 2020, with data collected prior to the pandemic, and discuss the vision of a future school food environment, where all children's needs are considered.



SCOTTISH CHILDREN'S DIET

In recent years, the diets of children in Scotland have not changed. The most recent data from the Scottish Health Survey show that in 2018, children in Scotland aged 2-15 consumed only 2.8 portions of fruit and vegetables per day on average⁹, well short of the 5-a-day recommendation. Furthermore, only 19% of children aged 2-15 ate oily fish every week. Meanwhile, 29% of children aged 2-15 (around a quarter of a million children) were at risk of overweight or obesity, with 16% of them at risk of obesity⁹. The Scottish government pledged to halve the childhood obesity rate by 2030, with a target of 7%; however, evidence suggests little progress has been made¹⁰.





OUR NEW RESEARCH

METHODS

The same methodology used in the 2017 and 2019 reports was employed in this study for consistency, and to allow for comparison across the years. In February 2020, websites of the 32 local authorities in Scotland were searched and primary school lunch menus identified. As in 2019, all but three councils (Orkney, Shetland and Western Isles (Eilean Siar)) provided this information. Using an online generator, one week was selected at random for each menu, which was then evaluated against pre-set criteria to assess the frequency of which certain food types were being offered. Nutritional information from the selected week was assessed, where available. This information was only provided by seven local authorities.

In addition, this year we analysed school meal uptake, with data collected from the 2019 School Healthy Living Survey¹¹. This was the most up to date School Healthy Living Survey available at time of publishing.

RESULTS

PRIMARY SCHOOL MEALS UPTAKE

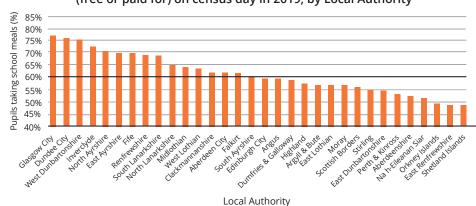
Between 2014 and 2015, when the Scottish Government introduced free school meals to all pupils in Primaries 1-3, overall primary school meal uptake – whether free or paid – jumped by 12%, to 65%. The percentage of primary school pupils in Scotland who were present and taking school meals on the day studied – whether free or paid – has fallen steadily in recent years, from a high of 66% in 2016, to a low of 60% in 2019.

Percentage of all primary school children in Scotland taking school meals (free or paid for), 2014-201



School meal uptake varies by local authority. In 2019, Moray had the largest number of primary school pupils taking school meals on census day – whether free or paid for – at 77%, closely followed by Highland at 76% and Perth & Kinross at 75%. The Scottish average was 60%, represented by the thick black line in the graph below, in 2019, with 14 local authorities falling below the average.

Percentage of all primary school pupils in Scotland who took school meals (free or paid for) on census day in 2019, by Local Authority



FREE SCHOOL MEALS

In 2019, 54% of all primary school pupils in Scotland were registered for free school meals. This percentage has remained consistent since 2015, fluctuating between 53-55% over the years.

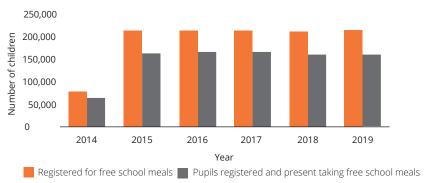
As shown in the graph below, there has been a discrepancy between the number of primary school pupils registered to receive free school meals (orange bar), and actual uptake (the grey bar) on the day studied, from 2015-2019. In 2019, only 79% of those registered to do so were present and taking free school meals. This is at its lowest level since 2014, when 89% of those registered were present and taking free school meals, and 2% lower than in 2018.

The percentage of primary school pupils registered for free school meals varies by local authority, with Glasgow City Council having the highest percentage registered (71%) and Shetland Islands having the lowest (45%), in 2019.

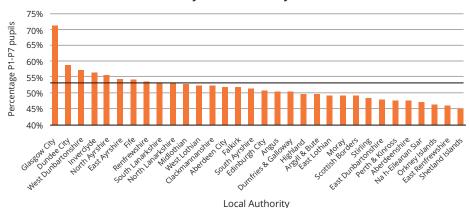
This may be somewhat explained by the introduction of a local initiative by Glasgow City Council in August 2018, which extended free school meals to include all Primary 4 pupils.



Number of primary school pupils in Scotland registered for free school meals vs those registered and present taking free meals, 2014-2019



Percentage of Primary 1-7 pupils registered for free school meals in 2019, by Local Authority









MENU ANALYSIS

Use unprocessed or minimally processed foods wherever possible

The Scottish Government pledged to amend the school nutrient standards to set a maximum limit for processed red meat consumption in schools, ensuring "no more than 175g of red and red processed meat can be provided over the course of the school week, of which no more than 100g should be red processed meat"³.

Our 2019 results suggested that progress was already being made towards this goal, with sausages and burgers being offered far less frequently in one week across all local authorities than in 2017: 16 occasions versus 23 occasions for sausages, and nine versus 14 occasions for burgers, respectively. Our new data show that this downward trend has continued into 2020, with sausages being offered on 14 occasions, and burgers on eight occasions during the week across all local authorities.

Similarly, there has been an overall reduction in the number of occasions any red or processed meat was offered on menus each week, falling from 114 times a week in 2017, to 92 times per week in 2019, to 79 times per week in 2020. This equates to a 14% reduction in the provision of red and processed meat since our 2019 report, and a 31% reduction since 2017. These results are extremely encouraging, and indicate that local authorities have been continuing their effort to bring menus closer to the new standard, prior to implementation.

Number of Local Authorities serving red or processed meat in 2017, 2019 and 2020

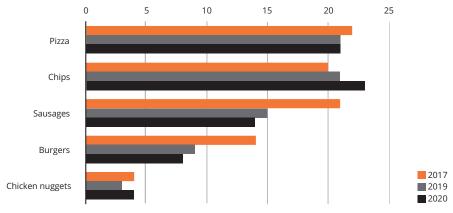
	2017	2019	2020	2019 vs 2020
EVERY SCHOOL DAY	11	4	3	
4 DAYS A WEEK	6	7	2	× ×
3 DAYS A WEEK	10	11	11	XII
2 DAYS A WEEK	2	4	10	7
1 DAY A WEEK	1	3	3	-
TOTAL	30	29	29	-

The table indicates that local authorities have moved from offering red or processed meat on their menus 4-5 days in a school week in 2017, towards 1-2 days in a school week in 2020.

The number of local authorities offering pizza has remained constant between 2017 and 2020, at around 21. In 2019, the number of local authorities serving chips increased by one to 21, and increased again in 2020 to 23 local authorities. While two local authorities that did have chips on their menus last year no longer have them this year, four local authorities who did not offer chips in 2019 during the week studied did offer them on their menus in 2020. Although this may be down to the random selection of the week analysed, such foods are associated with an 'unhealthy' diet, and, in non-school environments such as takeaways, often contain high levels of fat, sugar and or sal^{t12}. By including them on school menus, regardless of their nutrition content, it reinforces the acceptability of such foods to children, and may contribute to the formation of unhealthy habits. We should continue to try to reduce these food types on primary school menus.



Number of Local Authorities that served processed foods at least once a week, 2017, 2019 and 2020



In 2019 we also noted an increase in the availability of fish on menus, with 13 local authorities offering salmon on their menus and one offering mackerel. Overall, fish was offered on every school day by 15 local authorities in 2019, an increase of four since 2017. Unfortunately, this trend did not continue into 2020, with only 9 local authorities offering fish on their menus every day of the school week. Compared to 2019 when fish was offered on menus on 114 days across all local authorities, fish was offered on only 94 days in 2020: a decreased of 17.5%.

Surprisingly, the provision of tuna – normally a staple sandwich, wrap and baked potato filler– also decreased, with only nine local authorities offering it on their menu every school day, compared to 14 in the previous year. Mackerel was also no longer available on menus during the weeks studied.

Fish is a valuable protein source, and oily fish offer a great source of nutrients and omega-3 fatty acids. Including more oily fish on primary school menus would expose children to a wider range of options and help towards achieving the Scottish Dietary Goal of consuming at least one portion (140g) of oily fish per person per week¹³. In 2018, intake of oily fish in Scotland was only 34g per person per week; less than a quarter of the target

amount¹⁴.



STANDING OUT FROM THE CROWD

In 2020, Midlothian Council offered fish on their menu five days a week, including In 2020, Midlothian Council offered fish on their menu five days a week, including tuna and salmon. Not only that, they also offered no sausages, burgers, chicken nuggets or chips during the week studied – making sure salad and fruit was available every day!

2 Prioritise vegetables, soup and salads over puddings

In 2020, soup was offered on the menus of all local authorities during the week studied. In 2019, the number of local authorities offering soup every day fell to 10, from 12 in 2017. This remained the same in 2020. As well as being relatively cheap, easy to prepare and available in a variety of flavours to suit different tastes, soup provision offers a simple way of introducing more vegetables into children's diets. It could easily be a permanent daily fixture on primary school menus.

Number of Local Authorities offering soup in 2017, 2019 and 2020

	2017	2019	2020	2019 vs 2020
EVERY SCHOOL DAY	12	10	10	-
4 DAYS A WEEK	3	4	4	-
3 DAYS A WEEK	1	3	6	7
2 DAYS A WEEK	7	7	5	\sim
1 DAY A WEEK	5	4	4	-
NO SOUP OFFERED	1	1	0	\sim
TOTAL	30	29	29	-

Across all years studied, local authorities have been consistently good at providing salad on menus every day: from 27 local authorities in 2017, a slight drop to 25 in 2019 and rising again to 26 in 2020. In 2020, the number of occasions that salad was available during the week studied and across all local authorities was still lower than what was offered in 2017, at 130 vs 139, respectively. Bringing this closer to, or above, 2017 levels would help to bring local authorities closer to the new amendment to the school nutrition standards of including a minimum of two portions of vegetables within a primary school lunch.

Last year it was encouraging to see that only nine local authorities presented children with the choice

of 'soup or a pudding', compared to 14 in 2017: a choice similar to that of a 'starter or pudding' often presented to adults in a restaurant setting. This has risen again slightly, with 11 local authorities offering this choice in 2020. Encouragingly however, fruit was available five days a week across 24 of the 29 local authorities studied in 2020, meaning that the choice detailed above was not only a choice between soup and a less healthy pudding option.



STANDING OUT FROM THE CROWD





Reduce free sugar content in school meals towards those of the new Scottish Dietary Goals

The revised Scottish Dietary Goals¹³ recommend the following maximum daily levels of free sugars for children, so as not to exceed the recommendation of 5% of total energy intake:



19g per day (around five teaspoons) for children 4-6 years old



24g per day (six teaspoons) for children 7-10 years



30g per day (seven teaspoons) for children 11 years and older

In our 2019 report, we noted that the new school nutrition standards will allow free sugar content of school meals an upper limit of 7.5% for primary school pupils3. This target, therefore, no longer aligns with the Scottish dietary goal, with the Government's justification for this being that it "will ensure that free sugar provided as part of the school lunch service is significantly reduced, but at the same time recognises the severity of moving to a 5% nutrient standard for free sugar." Much of this free sugar content of school meals is provided by puddings.

In 2020, pudding options that did not include fruit or yoghurt were available an average of 2.7 days per week. This was consistent with their availability in 2019 (2.8 days a week), and a marked reduction from 4.2 days a week in 2017. In 2020, four local authorities offered pudding, other than fruit or yoghurt, every day of the school week. Sadly, this was double the number of authorities that

Number of Local Authorities offering pudding (other than fruit or yoghurt) in 2017, 2019 and 2020

	2017	2019	2020	2019 VS 2020
EVERY SCHOOL DAY	12	2	10	7
4 DAYS A WEEK	14	9	4	\
3 DAYS A WEEK	2	6	5	\sim
2 DAYS A WEEK	2	8	8	-
1 DAY A WEEK	0	2	4	7
NO PUDDING OFFERED (other than fruit or yoghurt)	0	2	2	-
TOTAL	30	29	29	-

provided this in 2019; however, it is still markedly below 2017 levels.

In 2019, we were encouraged to find that 26 local authorities offered fruit and yoghurt as a pudding option at least once a week. The same number of local authorities offered this in 2020, and further in line with last year's results, two local authorities offered fruit and yoghurt every day, with no unhealthy pudding options to choose from. Providing fruit as an option every day helps to bring menus closer towards the amended school nutrition standard requiring a minimum of one portion of fruit to be offered as part of a primary school lunch.



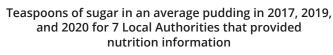
STANDING OUT FROM THE CROWD

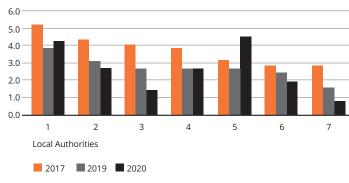


NUTRITION INFORMATION











PUDDINGS

YOGHURTS

CONCLUSION

Our 2020 review of primary school meals in Scotland has identified some improvements since 2019. One of the most encouraging findings is the continued reduction in the provision of red and processed meat, including sausages and burgers, alongside the continued provision of salads, fruit and yoghurt on the menus of many local authorities in the weeks assessed.

Although some slowing, or in some cases reversal of 2019's progress was noted in this review, particularly around overall and oily fish provision, an increase in the number of local authorities offering chips and puddings, and in increase in the calorie content of puddings: we remain encouraged by the improvements noted in our 2019 review, and hope that local authorities will continue to build on their commendable progress.

AN INSPIRATIONAL FUTURE VISION

We believe that the experience surrounding the eating of school meals is as important as the meal itself. Lunchtime provides children with a well-earned break from lessons, allowing for socialisation with friends, relationship building across the wider school community and an opportunity to learn about other cultures and dietary requirements. Children can be introduced to new tastes, learn about Scottish food heritage, health and the environment.

In 2020, Scotland's children are more involved than ever in driving discussions around environmental issues, with many taking part in mass climate 'strikes' inspired by young Swedish activist, Greta Thunberg¹⁵. It is important that we build on this momentum in order to interest children in food-

related environmental factors, such as recycling, food waste, sustainability and seasonality of produce.

Overall, we must strive to positively influence children's diets in the school environment. In order to do so, we must include consideration of the dining experience so that school meals are delivered in positive, vibrant physical and social environments. This is crucial as it may determine whether or not pupils choose the option of school meals, currently at their lowest uptake since the introduction of universal free school meals for Primary 1-3 pupils in 2015.

As we move on from the challenges and obstacle presented by the coronavirus pandemic, toward recovery and rebuild, we can begin to envision the ideal dining experience of primary school in Scotland. A future vision encompassing positive, vibrant physical and social environment described above, alongside the provision of

the best nutrition to support the growth, development and health of Scotland's children. Following our fourth recommendation from our previous reports, 'Create a positive physical and social environment for school meals', we highlighted seven themes, inspired by Better Eating, Better Learning¹6, which can determine how positive the school dining experience is . Below, we incorporate these themes into our future vision of the school dining experience.





A DAY IN THE LIFE OF FUTURE PRIMARY SCHOOL PUPILS IN SCOTLAND

THE LUNCH EXPERIENCE

As children enter the dining hall, the environment feels safe and welcoming to all, with a positive attitude displayed towards food. The catering staff are friendly and approachable, engaging in positive interactions with the children.

The food on offer is appealing: carefully prepared with attractive colours, tastes and textures. There is a range of healthy options on offer, increasing the likelihood that every child finds something that appeals to them. Staff ask for regular feedback from children about their views on the menus, and the children feel happy to have their voices heard. There is opportunity to try new things and involvement in menu planning. There is positive engagement with healthy choices.

Children feel unhurried, benefiting from the social interaction provided by the sufficient time that they have, able to enjoy what they are eating and vegetables. The dining hall is a good place to meet and a space they look forward to using.

The children feel comfortable in their environment: queueing times are short, perceptions of the school kitchen are positive, the dining area is clean and there is an appropriate level of noise. Proper plates and cutlery are used, tables are attractive and comfortable seating is available, with enough space to relax.

HOW DO CHILDREN GET THEIR FRUIT AND VEGETABLES THROUGHOUT THE DAY?

All children have access to a plentiful selection of fruit and vegetables, not just at lunchtime, but at suitable points throughout the day. Children are provided with a choice, with the freedom to choose as they like. Again, staff ask for regular feedback from children, ensuring that there is something on the menu that they enjoy. Quality fruit and vegetables are prepared carefully, with appealing presentation. At lunch time, salad bars

are the norm and are easy to access, and every child can see something that they like. Soup is available on menus daily, with different variations available throughout the week. Children feel encouraged to share what their favourite fruit and vegetables are, making suggestions for the menu.

HOW DO WE KEEP OUR CHILDREN HYDRATED?

In our future vision, Scotland has taken the lead from The Mayor of London's support for Public Health England's water-only schools toolkit, with Scottish schools adopting water-only policies. This has helped schools in Scotland to create a healthy whole school environment, allowing children to thrive. Children do not need to make a choice between sugary drinks, which contribute to health conditions such as obesity, type 2 diabetes and tooth decay.

There are water fountains at various locations throughout the school grounds and supply throughout the day is plentiful. Pupils are encouraged to drink water regularly throughout the day and carry reusable water bottles to

minimise the risk of spillages and help to protect their environment. There is less littering around the school grounds as less single-use plastic is available. Pupils and parents understand the multiple benefits of drinking water and pupils actively participate in promoting the benefits of water-only schools.



'JUMP IN' PROGRAMME, AMSTERDAM

WHAT IS 'JUMP-IN'?¹⁷

Jump-In is a multi-component programme aimed at helping Amsterdam's primary schools become healthy places through physical activity, active play and healthy diets. It currently runs in more than half of the city's primary schools: over 130 schools. Jump-in mainly focuses on areas with high levels of obesity and health inequalities. To encourage healthy diets, a school-wide nutrition policy is implemented. There are eight requirements for a primary school to become a Jump-in healthy school, including that health is a permanent priority, healthy eating and drinking is taught in class, birthday treats are kept healthy, and fruit is the only snack allowed and water or milk are the only drinks. Information about healthy lifestyle is shared with parents at meetings, and children have extra physical education classes and are encouraged to be active when playing outdoors.



JUMP-IN HEALTHY LIFESTYLE ADVISORS

In 2017 we visited a Jump-In school with a healthy lifestyle advisor Marijke, one of nine advisors employed by the city and in close contact with schools helping them to introduce the changes 18. The advisors work with headmasters and teachers, providing resources that stimulate healthy behaviour such as water bottles, lunchboxes, healthy treat booklets, sugary drinks boards, posters, and sports equipment and toys for children to play with outside during their breaks.



HOW IS THE PROGRAMME RECEIVED BY PUPILS AND PARENTS?

In the school we visited, the new rules were not a problem for parents of children starting school, but those used to the old ways of giving sweets, crisps and sugary drinks to their children needed some convincing. Schools organise meetings with parents to explain their reasons behind the rules and talk about healthy lifestyles. Explaining the benefits of the changes to both parents and children is a very important part of the work required of school staff, and the healthy lifestyle advisors offer support by providing resources and attending meetings with parents.

School meals are not provided in Amsterdam, instead, parents are asked to provide children with fruit and a wholegrain sandwich, along with plain milk if desired. Children can refill their water bottles at school. We were told that parents like this as the rules are simple and it is cheaper than buying processed snacks for lunchboxes.



WHAT MAKES IT SUCCESSFUL? 19

The programme reach expanded from around 8000 children in 2007 to 22,000 by 2016. Some of the main strengths of the programme include its multi-behavioural approach, encompassing physical activity, nutrition and education, and that it actively involves children and parents in the design, leading to long-term acceptance. It is also been integrated into Amsterdam's multisector, city-wide programme to tackle childhood overweight, the Amsterdam Healthy Weight Programme (AHWP), since 2012, strengthening support politically, structurally and financially. Although causality cannot be drawn, as the programme has grown, children's sugary drink consumption has decreased and there has been a large increase in schools introducing healthy nutrition policies.





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