



In 2017, we called for Scotland's policymakers and local authorities to help transform our school feeding culture into an eating culture.¹ To achieve this, we made four recommendations for action:

- 1 Use unprocessed or minimally processed foods wherever possible
- 2 Prioritise vegetables, soup and salads over puddings
- 3 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

These recommendations were based on our findings from a review of menus across Scottish primary schools. This report is an update using primary school meal menus from summer 2019. We looked at the menus again to see whether there had been any improvements since 2017.

In the interim, Scottish Government consulted on improving school food standards² and later in 2019 committed to introducing new regulations to make school food healthier.³ The changes are 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 produce.

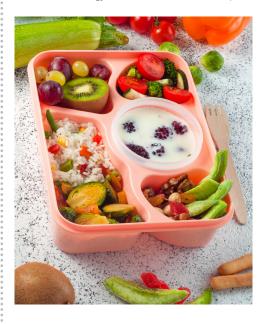


Overall, Scottish children's diets have not improved in recent years. The most recent data from the Scottish Health Survey⁴ show that in 2018, children in Scotland aged 2-15 were eating only 2.8 portions of fruit and vegetables per day on average, well short of the 5-a-day recommendation. Furthermore, only 19% of children aged 2-15 ate oily fish every week. Meanwhile, 29% of children aged 2-15 (around a guarter of a million children) were at risk of overweight or obesity, with 16% being at risk of obesity specifically. The Scottish government pledged to halve the childhood obesity rate by 2030, which we interpret as a target of 7%;5 the evidence does not suggest that progress has been made to meet that target yet.

Primary schools provide a unique opportunity to influence children's diets through their provision of healthy and delicious food to children four or five days a week. The introduction of Universal Free School Meals for children in P1-3 in 2015 has increased school meal uptake to 79% in P1-3 and to 60.4% of all primary school children.⁶ Therefore, the quality of these meals is important for both the physical health of Scotland's growing children and for their developing relationship with food, in terms of preferences, behaviours and skills.

OUR NEW RESEARCH

In summer 2019, websites of the 32 local authorities in Scotland were searched for primary school lunch menus. All but three councils (Orkney, Shetland and Western Isles (Eilean Siar)) provided this information. We randomly selected one week for each menu and evaluated what was offered. In addition, nutritional information was available from seven local authorities. This is the same methodology as we used in our 2017 report.



#HealthyWeightForAll





MENU ANALYSIS

How did primary schools perform in relation to the recommendations we made in 2017?

1 Use Unprocessed or Minimally Processed Foods Wherever Possible

Unprocessed and minimally processed foods are defined as those not processed at all or those processed using mostly physical processes to make single whole foods more durable, accessible, convenient, palatable or safe.⁷

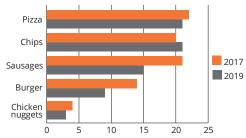
Examples include fresh, chilled, frozen, vacuum-packed fruits, vegetables, fungi, roots and tubers; grains (cereals) in general; fresh and dried beans and other pulses (legumes); dried fruits and 100% unsweetened fruit juices; unsalted nuts and seeds; fresh, dried, chilled frozen meats, poultry and fish; fresh and pasteurised milk, fermented milk such as plain yogurt; eggs; teas, coffee, herb infusions, tap water, bottled spring water.

Following their consultation on Food and Drink in Schools, in 2019, the Scottish Government pledged to amend the school nutrient standards to set a maximum limit for processed red meat consumption in schools. They will "ensure 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."⁸

Our new data suggests that progress is already being made to reduce red processed meat provision. In particular, it indicates a substantial reduction in the provision of sausages and burgers, down 29% and 36% since 2017, respectively. This may suggest an effort to bring the menus closer to the new standard.

	2017	2019	
EVERY SCHOOL DAY	11	4	
4 DAYS A WEEK	6	7	>
3 DAYS A WEEK	10	11	>
2 DAYS A WEEK	2	4	>
1 DAY A WEEK	1	3	>
TOTAL	30	29	

Numbers of local authorities that served red or processed meat in 2017 and 2019



Numbers of local authorities that served processed foods at least once a week in 2017 and 2019

A majority of local authorities offered pizza in both 2017 and 2019. Chips were served in 20 local authorities in 2017 and in 21 in 2019. In 2019, 1 local authority offered chips 3 times in the week studied. If school food is to be an exemplar for healthy eating, then foods like pizza, chips or burgers, should be minimised further. The presence of such foods on school menus can infer that they are acceptable on a daily basis, which may create unhealthy habits. These foods are colloquially referred to as 'junk food' and are widely available in less-healthy forms outside of school, often being served alongside chips.

Some local authorities still offered chicken nuggets in 2019. As the Scottish Government does not propose to include processed poultry within their restrictions for processed meat, we will monitor the situation closely to ensure that local authorities do not increase its provision in the place of red processed meats.

Setting a Good Example

Two councils (Argyll and Bute and East Lothian) did not offer pizza or chips at all on the menus analysed. This suggests an effort to diversify their menus instead of relying on easy options, which is more likely to lead to healthier habits forming in the long-term.

We also considered fish. Fish is a valuable and healthy protein source, and oily fish are a great source of important nutrients and omega-3 fatty acids. Our research found an increase in the number of days per week that tuna was provided across all local authorities. In fact, in 2019 there was an increase in the availability of all types of fish, with menus including options such as salmon fishcakes and fish fingers, as well as fish pie and breaded haddock. Overall, 13 local authorities provided salmon on their menus and 1, West Dunbartonshire Council, provided mackerel, in the form of a mackerel salad

In 2019, 15 local authorities offered fish every day of the school week, compared to 11 in 2017. This was mostly achieved through the offering of tuna filling for sandwiches, wraps or baked potatoes. However, in most of the authorities fish other than tuna was offered more often in 2019 too. The increase in fish availability may be more evidence of efforts to provide children with a wider range of options. This is very welcome, as strong evidence shows that children learn to like foods by being exposed to them.⁹

Setting a Good Example

East Dunbartonshire Council offered tuna option every day and there was fish other than tuna as an option on the menu three times during the week we analysed.

2 Prioritise vegetables, soups and salads over puddings

In 2019, almost all local authorities offered soup on their menus, the same as in 2017; however, the number of local authorities serving soup every day fell slightly in 2019 to 10, compared to 12 in 2017. Soup could be a mainstay of primary school meals: it is relatively cheap and easy to prepare, there are a variety of flavours, and it could provide one or two portions of vegetables per serving.

	2017	2019	
EVERY SCHOOL DAY	12	10	\searrow
4 DAYS A WEEK	3	4	7
3 DAYS A WEEK	1	3	7
2 DAYS A WEEK	7	7	-
1 DAY A WEEK	5	4	\mathbf{Y}
NO SOUP OFFERED	1	1	
TOTAL	30	29	

Numbers of local authorities that offered soup in 2017 and 2019

Setting a Good Example

East Ayrshire Council offered soup every day in 2019, and over a three-week period provided an excellent variety of 12 different soups to choose from.

Local authorities were very good at providing salad in both 2017 and 2019, although there was a slight decrease in the number of local authorities who offered salad every day: 27 local authorities in 2017 compared to 25 in 2019. Vegetables and salads are vital components of healthy diets that should be widely provided in primary school meals. Forthcoming amendments to the school nutrition standard by the Scottish Government will require "a minimum of two portions of vegetables and a portion of fruit to be offered as part of a primary school lunch".8

The usual provision of a two course meal in 2019 meant that children faced the same choice adults often do at restaurants: 'starter or pudding?' Encouragingly, only 9 local authorities offered a choice between soup and a pudding in 2019, compared to 14 in 2017. It is reassuring also that so many local authorities have decided to offer yoghurt and fruit as pudding options, so the choice for children was not only between soup and an unhealthy pudding.



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

The Scottish Dietary Goals, revised in 2016, 10 recommend the following maximum daily levels of free sugars for children, so as not to exceed the recommendation of 5% of total energy intake:

- 3 19g per day (around five teaspoons) for children 4-6 years old
- 24g per day (six teaspoons) for children 7-10 years old
- 30g per day (seven teaspoons) for children 11 years and older

Whilst the values for all other nutrients are to be aligned with the Scottish Dietary Goals, the Scottish Government will set an upper limit of 7.5% of recommended energy requirements to be provided by free sugars in school lunches for primary school age pupils. The Government have stated that this "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 the free sugar content of school meals is provided in puddings. In 2019, puddings, excluding fruit and yoghurt, were less available overall, at an average of 2.8 days a week compared to 4.2 days a week in 2017. Additionally, only 2 local authorities in Scotland offered a pudding (excluding fruit and yoghurt) every day, a great improvement on the 12 authorities who did so in 2017

	2017	2019	
	2017	2019	
EVERY SCHOOL DAY	12	2	
4 DAYS A WEEK	14	9	\searrow
3 DAYS A WEEK	2	6	>
2 DAYS A WEEK	2	8	>
1 DAY A WEEK	0	2	7
NO PUDDING OFFERED (OTHER THAN FRUIT & YOGHURT)	0	2	>
TOTAL	30	29	

Numbers of local authorities that offered pudding (other than fruit of yogurt) in 2017 and 2019

It was promising to see that 26 local authorities offered fruit and yoghurt as a pudding option at least once a week in 2019, compared to only 16 local authorities in 2017. This means it is possible that less free sugars were consumed by children during schools meals in 2019. It was also encouraging that 2 local authorities offered this as standard every day without providing any unhealthy pudding options alongside.

Setting a Good Example,

In 2019, **Edinburgh** and **Glasgow City Councils** offered only fruit or yoghurt, instead of providing unhealthy puddings. In 2017, no local authorities offered this.

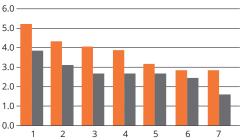


NUTRITION INFORMATION

The number of local authorities that provided nutrition information went down from 9 in 2017 to 7 in 2019. There is clear room for improvement.

PUDDINGS

The calorie content of puddings (other than fruit and yoghurt) was very similar in 2017 and 2019. There was some indication of lower sugar content in 2019 compared to 2017, at an average of 11g per pudding versus 14g per pudding, respectively. However, as this observation is based on data from only 7 local authorities, it can only be interpreted as an indication of a trend.



Teaspoons of sugar in an average pudding in 2017 and 2019, for 7 local authorities that provided nutrition information

While the chart above shows only weekly averages, the highest sugar option available in 2019 was an Apple Sponge and Custard that contained 29g of sugar per serving – more than seven teaspoons worth of sugar. This far exceeds the sugar recommendation for children under 10, and is almost the full daily allowance for older children. However, another local authority had a Crunchy Apple Crumble & Custard option with 7.3g of sugar, showing that it is possible to produce similar desserts with less sugar. We would encourage local authorities and school caterers to learn from each other about how to provide occasional puddings for children with minimal sugar.

YOGHURTS

The calorie content of a portion of yoghurt slightly increased from 2017 to 2019, This was caused by a shift towards whole milk yoghurts with slightly less sugar.

Increasing fruit provision is an ideal way to improve children's diets, as fruits are excellent sources of vitamins, minerals and fibre, there are a variety of them, and children love their different tastes, textures and colours. ¹¹ Fruit is also relatively satiating ¹² so may displace from the diet competitive sweets and snacks that tend to be less healthy. ¹³ In 2017, fruit was available as a pudding option in schools on less than 1 day per week on average, meaning that it was not available at all at many

local authorities, and only occasionally at others. In 2019, fruit availability more than doubled to over 2 days per week on average, often with yoghurt, as more cateriers continued to integrate fruit into their meal planning.

Scottish Government have committed to ensuring that there is increased access to fruit and vegetables at school. We would like to see fruit offered as part of lunch and at break times every day, in every school. This is likely to lead to healthier lifelong habits. It is clear that Scottish primary schools have increased their provisions of fruit and yoghurt since 2017, which is encouraging. Moving forward, we would like to see more local authorities offering fruit and yoghurt as their only pudding option.

CASE STUDY

Hermitage Park Primary School offers free fruit during breaks. The Munch 'n' Crunch initiative started because children had been having biscuits and family-sized bags of crisps as their breaktime snacks. These products are high in calories, sugar, fat and salt, and come in large amounts of unrecyclable packaging.

The school is in the area where 40% of children live in poverty. Although unhealthy snacks were not banned, the majority of the parents welcomed the scheme and stopped providing children with unhealthy snacks for their break times. The result is that children consume more fruit. The school stressed that it also introduced children to new flavours, normalised healthy snacking and improved concentration and behaviour. Additionally, as any snacks are now consumed in the classroom, it reduced playground litter and arguments between children, as everybody gets the same.

Hermitage Park Primary School has been proactive in seeking funding for Munch 'n' Crunch but stressed that this was difficult and is an on-going effort.



4 Create a positive physical and social environment for school meals

The food environment can help individuals develop healthy food habits. Increasing children's exposure to and enjoyment of a wide range of healthy foods shapes their preferences in positive ways¹⁴ which may empower them to make healthier choices, ¹⁵ instead of relying on the processed foods that are abundant in our wider food environment. Primary schools can and do provide this support, and the evidence from this report suggests that, in 2019, menus were improving and diversifying in several directions.



In 2017, we highlighted seven themes, inspired by Better Eating, Better Learning, ¹⁶ to improve the school food environment:

- 1 Safe and welcoming eating environment that demonstrates positive attitude towards food
- 2 Friendliness, approachability and positive interaction with the staff serving food
- 3 Sufficient time to enjoy lunch: unhurried, sociable and enjoyable
- 4 Appealing food that shows quality and careful preparation, with attractive colour, texture, taste
- 5 Appropriate environment: short queuing times and conditions, comfortable seating arrangement and space, good cleanliness of the dining area, positive perception of standards of the school kitchen, appropriate noise levels, proper plates and cutlery
- **Choice and freedom**: a range of healthy options as well as asking for regular feedback and views on the menu
- 7 Clear school food values. Each local authority should support their healthy school meal menu with a strong narrative (marketing) aimed at both children and parents, highlighting the school meal as an example of good nutrition, and learning about diet and environment



In May 2018 the Children's Parliament conducted qualitative research which addressed several of these points .¹⁷ They held workshops with 236 of their members, aged between 5 and 16, across 5 primary schools and 2 secondary schools in 7 local authorities: Edinburgh, Glasgow, Midlothian, Aberdeen, Highland, Western Isles and Scottish Borders. An online survey about school food was also conducted with 201 children. The children involved represented a diverse range of backgrounds, experiences and abilities, ensuring that a range of views would be reflected in the resulting report.

KEY FINDINGS FROM CHILDREN'S PARLIAMENT WORKSHOPS IN 2018

The workshops identified 6 key themes - healthy vs unhealthy, choice and diversity, preparation and presentation, availability and accessibility, cost and which foods they would include on their idea menu. Recommendations from children included:

Healthy vs unhealthy

Introduce salad bars to both primary and secondary schools

- Reduce the amount of processed food and use fresh, quality ingredients
- Serve healthier desserts such as fresh fruit, frozen yoghurt and fruit puddings

Choice and diversity

- >> Introduce more variety by changing the menus regularly and offer more choices
- Introduce international food-themed days to enable children to try new, different foods
- Involve children in decisions about school food and listen to children's views

Preparation and presentation

- >> Ensure food is prepared and cooked to the best possible standard
- Encourage schools to use locally sourced food, and where possible, encourage schools to prepare and cook food on site
- Involve children in the sourcing and preparation of food as well as decision making about their school food

Availability and accessibility

- >> Create food stations or "stalls" for children to choose their food from to reduce waiting times and to cater for children who have activities on at lunchtime
- Ensure water fountains are available and accessible at every school
- Encourage schools to listen to children's experiences of break and mealtimes at schools to create more effective queuing and serving solutions for each school

Cost

- Encourage more primary and secondary schools to adopt low-cost, "healthy" tuckshops at break times
- Introduce free fruit, veg and water to both primary and secondary schools

WHICH FOODS WOULD YOU INCLUDE ON YOUR IDEAL MENU?

Children would like to see many different foods on their menus, some healthy, and some less so. For example, some children said that their ideal menu would contain salads, more fruit and vegetables or soup and a sandwich, whilst some said theirs would contain foods typically found on children's menus outside of school, such as hotdogs, chicken nuggets, burgers and chocolate cake.









CONCLUSIONS

Our 2019 research into primary school lunch menus across Scotland has found evidence of improvements since 2017. There was a decrease in availability of processed red meats, including sausages and burgers, as well as a reduction in puddings, other than fruit or yoghurt. Yoghurt and fruit has greatly increased as a pudding option. Finally, where puddings were available, councils appeared to be reducing sugar content.

These changes are good news and demonstrate progress on our recommendations. However, the overall quality of primary school meals can still be improved: more authorities could offer soup and oily fish, provision of pizza, chips and puddings could be less frequent, and nutrition information could be made available in more areas. Fruit at break times and more soup offerings at lunch could make a difference to children's daily fruit and vegetable intakes and developing food habits. The good examples included in this report demonstrate that all of this is possible.

The Scottish Government's pledge to reduce red processed meat and sugar, and to increase fruit and vegetable content of primary school menus is welcome, and if implemented as promised, Scotland's children can only benefit.

We are therefore calling for continued improvements around our four recommendations to be implemented for the sake of the health of Scottish children.



- Use unprocessed or minimally processed foods wherever possible
- 2 Prioritise vegetables, soup and salads over puddings
- 3 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



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