Healthy food provision and promotion in primary and secondary school

Impacts in school and beyond

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ACKNOWLEDGEMENTS

BRIEFING PAPER **8** *FINDINGS SERIES*

Glasgow
Centre for
Population
Health

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RECOMMENDATIONS

1. Local authorities should do everything within their powers to tackle the issue of vans and local shops targeting pupils with cheap, unhealthy meal options at lunchtime.

2. Schools should continue to provide and promote healthy food and drinks. Initiatives such as breakfast, free fruit and access to fresh, chilled water were considered to be very successful. Parents and pupils also felt that this school-based provision was having a positive influence on the home environment.

3. School catering and teaching staff should continue to monitor school-based provision and respond to feedback from pupils regarding menus. Research findings revealed that pupils disliked certain lunch menu options. Furthermore, the decrease in the number of menu options had been badly received. However, the catering service was aware of this and has already acted upon such feedback, providing a greater choice at lunchtime.

4. In order to increase uptake of school lunches, different approaches are likely to be needed for primary and secondary school pupils. Primary pupils tend to favour the current approach of offering exclusively healthy options as menu choices. They also think that teaching staff have a role to play in promoting school lunch uptake. Generally, secondary pupils are less positive about current provision and favour the inclusion of unhealthy options on the menu at times. The catering service and schools should continue to explore ways to engage with junior secondary school pupils in relation to the healthy eating agenda.

5. Pack lunches and snacks were a cause for concern. Stakeholders in local authorities, in collaboration with NHS boards and other partners could consider producing and distributing leaflets outlining healthy pack lunch ideas to the home. Head teachers could consider banning the consumption of certain items in school, such as unhealthy snacks and fizzy/sugary drinks.

6. There was only limited support for preventing secondary school pupils from leaving the school premises at lunchtime in order to increase school meal uptake. Any attempts at introducing even a partial ban should be considered very carefully, and after consultation with the relevant school staff and pupils. A pilot exercise might be an appropriate first step.

7. Respondents felt that school-based provision and promotion of healthy food and drinks had made at least a modest impact on dietary practice outside school. However, respondents also considered that local authorities should not attempt to influence dietary practice in the home more directly as it might lead to increased parental and pupil resistance and resentment.

8. Local authorities should work with partner organisations, pupils and parents in order to continue to explore the links between healthy eating and the curriculum, incentives to promote the uptake of healthy choices and ways of optimising the physical and social environment in schools at lunchtime.

INTRODUCTION

The Scottish diet continues to be high in fat, salt and sugar and low in fruit and vegetables despite many years of national and local policies and programmes aiming to improve nutrition within the Scottish population. [1] School food policy has an important role to play in the provision and promotion of a healthy diet amongst Scottish children and young people. The Schools Health Promotion and Nutrition Bill (Scotland) provides further impetus to embed school based provision and promotion of healthy food and drinks in legislation. [2]

Glasgow City Council (GCC) approached the Glasgow Centre for Population Health to facilitate an evaluation of their school-based initiatives and programmes designed to provide and promote healthy eating in the school setting. GCC was interested in taking stock of and evaluating the impacts of their initiatives on healthy eating within school and beyond the school gate, in the home.

A research study was conducted in two stages:

Stage one focused on impacts within school and comprised: a) a review of the literature; and b) quantitative and qualitative research in selected Glasgow primary schools to ascertain types of food and drinks consumed across the school day by different pupil groups and to explore the influence of the physical and social environment on food choices. The literature review was published in March 2006.[3] Research findings from this stage are summarised in GCPH Briefing Paper Findings Series 1: Healthy Food Provision and Promotion in Primary School: What impact is it having on food choices?[4]

Stage two comprised a qualitative exploration of the impact of school-based provision of healthy food and drinks on food and drink choices beyond the school gates. Research participants included primary and secondary school pupils, parents, teachers and catering staff. The Scottish Centre for Social Research (ScotCen) was commissioned to conduct this second stage.

AIMS AND PURPOSE

The main aim of the research was to explore the impact of school-based provision of healthy food and drinks on pupils' dietary preferences and practices within school and beyond the school gate. A secondary aim was to explore pupil and parental views regarding the future development of the healthy eating agenda in school. Objectives were:

1. To examine the impact of school-based provision of healthy food and drinks on pupils' dietary preferences and practices in school.
2. To explore any impact of GCC's approach on dietary preferences and practices in the home.
3. To identify facilitators and barriers to healthy eating.
4. To explore pupil and parental views in order to inform GCC's future programmes.

APPROACH AND METHODS

A qualitative research approach involving pupils, parents, school staff and selected individuals with a strategic remit provided an appropriate method of exploring the context behind school food policy and pupils' dietary preferences and behaviour in school and at home.

ScotCen utilised qualitative methods comprising:

1. Formative phase: In-depth qualitative interviews with key stakeholders including head teachers, representatives of Direct and Care Services (DACS) and NHS Greater Glasgow and Clyde, and parents/carers of pupils. In addition, a group discussion was held with a secondary school pupil council.
2. Focus groups with primary and secondary school pupils.
3. Focus groups or in-depth interviews with parents/carers of pupils at two primary and two secondary schools.

1.   Formative phase

The ScotCen research team conducted six in-depth interviews with key stakeholders, and convened one group discussion with a pupil council. A meeting was also held with the research advisory group which helped shape the development of the research methodology and recruitment process. Six participating schools (four primary and two secondary) were selected by the advisory group. Three primary schools were situated in deprived areas and one in a more affluent area. One secondary school was situated in a deprived area and one in a more affluent area. This selection allowed a comparison of views between pupils/parents from differing socio-economic backgrounds. Three out of four of the primary schools were feeder schools for one or other of the two secondary schools.

Ethical permission for the study was obtained from Glasgow City Council's Director of Education.

2.   Focus groups with primary and secondary school pupils

The research team convened 'friendship mini groups' with school pupils. These specialised focus groups take about 20-25 minutes to complete. Each group normally consists of three to four friends, often of the same sex.

The research team worked with the six schools in order to recruit pupils for focus groups. In addition, school staff circulated information and 'opt-out' consent sheets to parents and carers of groups of friends to reflect the following characteristics:

- The groups should contain a mix of pupils that usually took school lunches, usually took packed lunches or ate outside school;

- If possible, the groups should include pupils entitled to free school meals and those without such an entitlement;
- In the four primary schools a group should be convened in the primary five, six and seven years (12 groups);
- In the two secondary schools a group should be convened in the secondary one and two years (four groups);
- Both boys and girls should be participants, although not always within the same group.

Focus groups addressed issues such as:

- Dietary preferences and practices within the school in relation to the breakfast service, snacks, school lunches and packed lunches;
- Perceptions and opinions of the healthy eating initiatives within the school, including exploration of issues such as standard of food and drinks on offer, palatability, choice etc.;
- Influence of pupils, if any, on food bought for and provided in the home;
- Impact of school-based initiatives on pupils' dietary preferences and practices within the home;
- Barriers and facilitators to healthy eating.

3. Focus groups or in-depth interviews with parents/carers of pupils at two primary and two secondary schools

ScotCen researchers set out to convene focus groups with parents and carers in four schools with the help of school staff. Parents were informed that donations would be made to school funds as an incentive to take part in the research. Recruitment of parents aimed to reflect the following issues:

- Parents should ideally have had sons and daughters in the primary and secondary years covered by the pupil 'mini groups' (primary five to secondary two);
- Children of the parents should be engaging in a range of dietary practices within school (i.e. take school meals, packed lunches or eat outside school at lunchtime);
- Parents should not solely be 'the usual suspects', i.e. parents already involved in the life of the school through parent teacher associations or school boards, although inevitably this group would be likely to be willing to take part and should not be ignored in terms of recruitment.

In one primary school, it proved impossible to convene a group discussion due to a lack of response from interested parents. In this school, two in-depth interviews with parents were conducted. In the three other schools (two secondary and one primary), group discussions were convened with parents; the numbers in these groups ranged from three to five.

The parental groups and interviews addressed issues such as:

- Knowledge and views of school-based healthy eating initiatives and the eating environment within schools;
- Parental perceptions of pupils' dietary practices and preferences within schools, including packed lunches, school lunches, snacks and food/drinks purchased outside school (secondary school groups);

- Perceptions of changes in their children's eating habits;
- The wider context surrounding healthy eating, and barriers and facilitators for healthy eating, including the availability of healthy food, the existence of healthy food co-operatives, the cost of healthy food etc;
- Perceptions of impact, if any, on dietary preferences and practices within the home, and possible links between school initiatives and any changes within the home;
- What factors, if any, would encourage or enable parents to adopt healthier eating practices within the home;
- Any changes GCC and schools could make to further support parents in the provision of healthy food in the home, and whether parents were motivated towards providing a healthy diet in the first place.

Analysis

The key stakeholder interviews were audio recorded and fully transcribed. After emergent themes were identified, these transcripts were used to help frame research instruments and questions for the main phase of the research. The parental focus groups and interviews were audio recorded, fully transcribed and entered into a qualitative analysis programme. Thematic analysis was carried out, and verbatim, anonymised quotes were used in the final report. All focus mini-groups with pupils were also audio recorded, fully transcribed and analysed. Again, thematic analysis was carried out and verbatim quotes were used in the final report.

FINDINGS AND CONCLUSIONS

Participant profile

Table 1 shows that the pupil mini-group size ranged from three to six pupils. All of the pupil groups comprised boys and girls and participants were involved in a range of different lunchtime eating practices at school, including taking school lunches, packed lunches or eating outside school. As would be expected, eating outside school was cited more by secondary school respondents. Many of the respondents reported that they adopted different lunchtime eating practices over the course of one week. Parental respondents were almost all female and many were parents of children in the same school years as those pupils involved in the mini-groups, as well parents of other children in school years not included in focus groups.

Table 1: School type by socioeconomic status and respondent groups

School	Type of School	Socioeconomic Status	Pupil Groups	Parental Groups
School 1	Primary	Relatively deprived	Primary 5 (n=5) Primary 6 (n=5) Primary 7 (n=5)	-
School 2	Primary	Relatively deprived	Primary 5 (n=5) Primary 6 (n=3) Primary 7 (n=4)	-
School 3	Primary	Relatively deprived	Primary 5 (n=4) Primary 6 (n=4) Primary 7 (n=4)	Joint interview (n=2)
School 4	Primary	Relatively affluent	Primary 5 (n=3) Primary 6 (n=4) Primary 7 (n=4)	Focus group (n=3)
School 5	Secondary	Relatively deprived	Secondary 1 (n=5) Secondary 2 (n=6)	Focus group (n=4)
School 6	Secondary	Relatively affluent	Secondary 1 (n=5) Secondary 2 (n=5)	Focus group (n=5)

General views of school-based initiatives, including school lunch

Primary pupils considered that initiatives such as breakfast services, the 'Refresh' scheme (providing access to fresh, chilled drinking water) and free fruit schemes in primary school had been very successful.

the apples and bananas at the lunch hall, they've made me more of a banana person 'cause I used to just eat apples all the time...

Now see when I drink water in school, sometimes I drink water in the hoose tae and I'd have about seven cups a day and ....

... I drink at home as well, I drink milk during the day but at night time I just drink water sometimes...

Focus Group 9, School 3, Primary 7 pupils

Primary pupils were also positive regarding current school lunch provision and supported the inclusion of healthy options although some respondents pointed out that choice was limited for pupils in later sittings.

If you're last in the line... 'cause always the good things are always away and you get the lasagne, that's no' very nice... you end up getting vegetarian meals or something you don't like.

Focus Group 8, School 3, Primary 6 pupils

Parents tended to reflect the views of the pupil groups within the same schools.

So that's a big factor but he quite likes to eat the school meals and I think from what I've seen they've improved a bit and ...

Yeah, that definitely has improved and they don't have as many cakes and sweets and things, well they don't have sweets at all now...

Focus Group 18, School 4, parents

Secondary school pupils were more negative in their views of school lunches, particularly regarding the introduction of the new healthier menus in 2006. They criticised the quality of school meals, which they said used cheap ingredients, and were bland and unappetising. Nonetheless, there was still some variation in opinion as the quotes below illustrate.

I took them at the start of the year but then they just kind of just got rubbish...

They've actually taken out basically everything that makes a good meal, all the tasty (bits)... they've taken all the salt out, fat. If it's like macaroni cheese they use like very low fat cheese so the cheese doesn't taste like cheese and it just doesn't taste like anything really and the pasta – it's just boiled, the rice boiled, just nothing, no' even the tiniest bit of salt.

Focus Group 15, School 6, Secondary 1 pupils

I don't know, when you get lasagne an all that it's pure hard and everything, it's disgusting...

Every time I get it it's pure nice.

Focus Group 13, School 5, Secondary 1 pupils

Respondents were asked whether they thought teachers should be present in the canteen at lunch-time. Primary school respondents thought that the presence of staff, to encourage pupils to try new options and to act as role models by eating their lunches with the pupils, would encourage uptake.

There are table monitors that keep an eye on what people are eating and if somebody is not eating much they encourage them to eat their lunch.

The teachers take school lunch but they take it to the staff room. I bet they've got cakes in the staff room!

Focus Group 8, School 3, Primary 6 pupils

Secondary school respondents thought the opposite – they thought that the presence of teaching staff would discourage uptake.

Difference between boys and girls

No clear pattern emerged between lunchtime eating habits of boys and girls. Most groups considered that there was little difference between what girls and boys ate. However, one group thought that more girls took school lunch as they were choosier, more sensible, and not as prone to eat junk food.

I think boys probably live in the moment a wee bit more, they're just kinda ... eat a burger, eat the chips, whereas if I was to eat a burger and chips I'd be like... I'm not going to really enjoy it that much, it's not going to do me any good...

Focus Group 16, School 6, Secondary 2 pupils

However, two of the primary groups argued that the reverse was true at that age, with girls preferring to consume unhealthy food and drinks.

Age differences

Secondary school pupils and parents considered that pupils in the early secondary years relished the freedom of leaving the school at lunchtime and being able to explore local shops and centres. One parental group argued that this effect wore off as the pupils advanced through secondary school and the rites of passage afforded by leaving the school lost much of their appeal.

The primary school respondents thought that peer influence had little impact on their own dietary practices within school. However, the secondary school groups felt that friends would often follow the same pattern of behaviour at lunchtime. Parental influence was not viewed as holding much sway among respondents, apart from in the instances when the parents provided packed lunches or insisted that pupils should take school lunches.

Barriers and facilitators to healthy eating in school and at home

Packed lunches, brought in from home and consumed at lunchtime were described by pupils and parents as full of fatty, sugary foods and fizzy drinks.

Like some people have like a lot of chocolate bars in their packed lunches.

... and ginger, lots of ginger.

And sometimes they have two bottles of coke and two packets of crisps...

<div align="right">Focus Group 1, School 1, Primary 5 pupils</div>

A few parents took the view that they liked to know what their children ate during the school day and prepared a packed lunch for them for this reason.

And the thing about packed lunches is... you know what you're putting into that packed lunch so you know what they're eating every day, whereas if you're giving them money for school lunch you really don't know what they're eating.

<div align="right">Focus Group 20, School 6, parents</div>

Barriers to taking school meals cited by pupils were that the school canteen environment was off-putting and often cramped. Also, although respondents acknowledged that school lunches were cheap, some examples were given of unhealthy food available near the school at lunchtime at low cost.

The doughnuts are like 44 pence and you can get like six doughnuts for like 50 pence in Morrisons and that...

... that bakers is really good value because..., I know it is pure advertising right and... it's a bottle of juice ...Or water, roll and potato scone or something and a doughnut for .... One pound.

<div align="right">Focus Group 16, School 6, Secondary 2 pupils</div>

Secondary school respondents considered that they should be allowed to leave the school at lunchtime. They felt that schools did not have the right to restrict their movements at lunchtime and, as they were relatively negative regarding the standard of school meals, any move to prevent them leaving the school premises would result in ill-feeling. A minority of secondary school respondents argued that there was a case for stopping pupils leaving the school grounds at lunchtime for safety reasons, and that a partial ban might operate with different secondary years being allowed out at lunchtime on certain days of the week only.

Parents from one primary and one secondary focus group thought that there was a case for stopping both primary and secondary pupils from leaving the school at lunchtime. They were concerned regarding pupils' safety around busy shopping centres, car parks and roads. One group proposed a partial restriction operating for different school years on different days.

if they kept the first and second years in at lunchtime as well, just allowed the older kids to go out.

Or separated it, you know maybe two days a week you must go out ... you're allowed out, three you must stay in and alternate days in the canteen ....

And that would give them a chance to see what was on offer and they might find other things that they like there.

<div align="right">Focus Group 19, School 5, parents</div>

A few parents also expressed concern regarding the availability of unhealthy food near schools and thought that vans selling unhealthy options to pupils outside schools should be banned from doing so.

I think the schools are trying their best to educate the kids in healthy eating but I think it should come from the home because there's only so much they can teach them, if the parents aren't willing to put their foot down and say 'no you're no having this'…

I mean there must be at least four Chinese, at least, maybe even more in walking distance and as you say there's then … I think there's one chip shop and there's …

… and there's two bakers and a couple of cafés.

Focus Group 19, School 5, parents

There were mixed views regarding the cost and availability of healthy and unhealthy food in communities. Pupils considered that healthy options were cheaper, although others mentioned special offers on relatively unhealthy food that were very inexpensive. There was a general consensus that organic food could be expensive. One parent group stressed that less affluent parents might struggle to buy good quality food at times. The availability of healthy food was not thought to be a great problem, although some groups of pupils mentioned the abundance of outlets selling unhealthy food around the school. Other groups suggested that most parents had access to supermarkets or other large stores that did stock a wide range of food and drinks.

I don't think it costs more, junk food costs a lot of money. I was weighing it up with the fruit and veg, you can get fruit really reasonable now, especially in the fruit shops, I'm not saying the supermarkets but the actual fruit shops are great, their variety is great and their prices are great as well, you've just go to get out there and have a look and not just grab the first thing that's available, I think that's the problem as well…

Focus Group 19, School 5, parents

Impacts of school-based programmes and initiatives in the home

School-based provision of healthy food and drinks did seem to have had some impact beyond the school gate. The majority of pupils and parents said that, in a family context, they were buying and eating more fruit and vegetables, as well as trying out new dishes such as lasagne or spaghetti bolognaise.   They also reported that they were drinking less sugary and fizzy drinks, and more water, milk and fruit juice.

Well my dad started a few changes, my dad wants us all to go vegetarian in our family so he's buying wholemeal bread and organic stuff,… and he's put loads of exercise bikes in the house…

Focus Group 7, School 3, Primary 5 pupils

I think they do seem to talk a lot about healthy eating, there's a big health drive, they're much more aware… at home my children will try vegetables and they're both quite good really at eating vegetables along with their dinner and they like to check at the end of the day that they've had their five portions. I know that that's down to what they're hearing in school you know, so that's quite good.

I think the fruit initiative was a big thing, I mean I always had fruits but what I'm finding, after the school brought in all the fruit, I started buying more and more fruit because I couldn't keep up with the demand for fruit so I just thought 'this is great'… The initiative in the school has made them eat I would say probably double what they ate before in fruit…

That's what happened with X, he couldn't get the hot dog and he had the chicken curry and he came home and he said 'mum, it was absolutely delicious' but I thought if the hot dog had been there he would have had the hot dog and he wouldn't have known….

<div align="right">

Focus Group 18, School 4, parents
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There were differences, though, in views of the impact of school based initiatives and programmes on the home. Pupils and parents from school six considered that the poor quality school food they perceived as being available within school would not influence the attitudes or behaviours of pupils or parents towards healthy eating. Similarly, pupil respondents in other schools said that they had not changed the type of food and drinks they consumed outside school since the initiatives had started. When they were asked to give more details of food consumed outside school, both healthy and unhealthy examples were given, suggesting that in some cases, school-based initiatives might not have influenced pupils' and families' dietary preferences and practices.

Informing future school-based programmes

Despite reservations, respondents thought that schools in Glasgow should continue their healthy eating programmes. Even those who criticised current school meal provision thought that the trend towards healthy school meals should continue as it still had the capacity to influence the dietary practice of a few pupils for the better. Also, as has already been discussed, a few parents thought that vans selling unhealthy options to pupils outside the school gates should be banned from doing so.

a small number of kids that do stick by it and they take the healthy option, …but that's better than none…

Well if there is a problem with obesity in… Glasgow and the West of Scotland in particular, I think we've got to make some efforts…

I'd like to ban the van, it's a temptation for the kids.

<div align="right">

Focus Group 20, School 6, parents
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Improving the quality of school meals had different meanings for primary and secondary school pupils. Secondary school pupils proposed that quality would be improved by the inclusion of unhealthy options on the menu on one to two days, whereas primary school pupils thought that unhealthy options should not be part of the school lunch menu at all.

You can have a healthier life and most people have lunches now so most people are getting healthy

Yes, healthy food gives you energy not like when there was salt and pepper in everything that just made you feel bloated.

<div align="right">

Focus Group 4, School 2, Primary 5 pupils
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I think if they're going to keep it running they should add more flavours and let the kids pick what they want.

The problem is if you take out too much fat, salt..., you're actually losing out on the important vitamins which you actually need...

Focus Group 15, School 6, Secondary 1 pupils

In general, pupils and parents felt that GCC and schools should think very carefully before attempting to influence families more directly in their home environment. Pupils and parents felt that such attempts would be met with a mixture of indifference, resentment and resistance.

I don't think (the school) should.

No, 'cause you cannae boss our parents.

Focus Group 3, School 1, Primary 7 pupils

...all they can do is make the children aware of what's good for them.

You can't go home and knock on doors, you know, 'this is what you need to make .....'

That's right.

Focus Group 18, School 4, parents

Respondents came up with suggestions for promoting healthy eating outside school. These included cookery workshops for parents and pupils; healthy packed lunch ideas for parents; more links between healthy eating and the taught curriculum; and incentives and prizes for pupils who make healthy choices. However, responses indicated that some of these ideas had been attempted before, and had not always been successful.

They could like show your parents what you should be putting in your children's lunch boxes...

They could tell all the parents at parents' night 'cause that's just at the end of this month, what's in the school lunches and everything.

Maybe you could ask... some of the parents to maybe come down and see what kind of food the school are selling and to follow their example.

Focus Group 11, School 4, Primary 6 pupils

I think they should promote it more and let the parents know what healthy initiatives they're thinking about doing... that would be a good idea.

Or if they ran like workshops for healthy cooking, maybe they just don't know how to cook, I mean I don't and if you're on a low budget then convenience foods and all the fatty foods like burgers fill them up because at the end of the day fruit and veg do not fill children, especially adolescents...

WHAT ABOUT JOINT PUPIL/PARENTS CLASSES?

That might be an idea actually, that might be quite good.

Focus Group 20, School 6, parents

CONCLUSIONS

Research findings reinforce the evidence from elsewhere that healthy food provision and promotion in school can have a positive impact on pupils and parents' dietary preferences and practices.[5] A holistic approach to the promotion of healthy eating in schools is being widely promoted as best practice for general promotion of physical, mental and social well-being for pupils and staff as well as for educational attainment. [6]

It was clear that pupils and parents felt that attempts by GCC to exert more direct influence on dietary preferences and practices in the home would be both inappropriate and unwelcome. Despite this, respondents felt that the healthy eating agenda should be pursued in both primary and secondary schools and called for further integration of the curriculum to reinforce messages and promote the development of cooking skills. Further consideration should be given to how best to build on early successes and how to foster pupil and parent involvement in the further development of school-based initiatives, particularly in secondary schools. The Scottish Schools (Parental Involvement) Act 2006 aims to encourage more parents to become involved in their children's education in a broader sense and to allow greater development of joint working between parents and school staff.[7] Healthy eating is an ideal arena in which to pursue this agenda.

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