



**Evaluating the Impact
of the 'Big Eat In'
Secondary School Pilot**

ACKNOWLEDGEMENTS

The Scottish Centre for Social Research (ScotCen) (www.scotcen.org.uk) conducted the qualitative and observational data collection, analysis and write-up. The research team comprised: Andy MacGregor, Susan McConville, Judith Mabelis, Louise Marryat and Irene Miller. A full research report is available on the Glasgow Centre for Population Health (GCPH) website (www.gcph.co.uk).

Quantitative data collection and analysis was conducted by Fiona Crawford (GCPH) and Helena Hailstone (Cordia) with help from Bruce Whyte (GCPH).

Many thanks to everyone who gave their assistance to the research team especially pupils, parents and staff who participated in the focus groups and interviews.

Thanks also to the 'Big Eat In' steering group who provided support and advice during the evaluation, finalisation of results and production of final reports.

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IMPLICATIONS FOR POLICY AND PRACTICE

- The Big Eat In (BEI) pilot was successful in encouraging S1 pupils to stay within school at lunchtime and school meal uptake rates by S1 pupils remained higher than the previous year. S1 pupils were positive about their experience of the BEI and the majority of respondents were in favour of the S1 stay on site policy being continued in pilot schools and extended to other secondary schools. There is clear potential for Glasgow City Council to sustain and extend lunchtime stay on site policies in secondary schools in Glasgow. The success of the BEI also has implications for secondary school lunchtime policy elsewhere in Scotland.
- School lunchtime policies in primary schools are also important and should complement rather than contradict secondary school policies. At present there is a clear discrepancy in approach. A site survey of head teachers, conducted by Glasgow City Council (GCC) Education Services in 2008, found that approximately half of those who responded permitted pupils to leave school at lunchtime to access local shops.¹ If primary school pupils have permission to leave school at lunchtime then it will be more difficult to implement stay on site policies in their first year of secondary school.
- School meal uptake rates in secondary schools with stay on site policies should be monitored and compared to schools with no stay on site policies to gauge impacts of these policies, not only on S1 school meal uptake rates but also on other year groups' uptake rates.
- Provision of lunchtime activities was one of the major successes of the BEI. Partnership working between school staff, Culture and Sport Glasgow (CSG) (now Glasgow Life), community groups and volunteers (and possibly senior pupils) should be consolidated and strengthened in order to sustain the provision of lunchtime activities and, where possible, build on and develop this provision to include other year groups.
- Schools implementing stay on site policies should consider the introduction of measures tested out in the BEI that ameliorate the shortage of time at lunchtime, allowing S1 pupils to eat lunch and participate in a lunchtime activity. Examples of measures that could be considered include queue rotas, priority for those pupils taking part in an activity, provision of lunch pre-ordering systems, and staggered lunch breaks.
- During the pilot, school staff members gave up some of their free time to supervise and monitor the canteen and the school gates, as well as running and assisting with activities. If schools do implement such a programme thought should be given to human resource implications for teaching staff.
- School staff and parents want further action taken on vans and outlets selling unhealthy food and drinks that target school pupils at different times of the day, not just at lunchtime. Further attempts should be made by Glasgow City Council and partners to work with the proprietors of vans and food outlets to provide healthier choices for pupils. Licensing and planning policies could be better utilised to enhance efforts to create healthier environments around schools and research could be undertaken to assess the nutritional value of food and drinks sold in outlets near schools.

INTRODUCTION

Scottish children and young people follow a diet that falls short of national recommendations and is less healthy than that of other European countries.² Poor diet contributes to excessive weight-gain.³ Increasing levels of child and adult obesity are already damaging health and wellbeing; experts have called for greater, concerted, system wide action on what they regard as a 'public health time bomb.'⁴ According to recent data on obesity prevalence in OECD (Organisation for Economic Co-operation and Development) countries, Scotland ranks second only to the United States.⁵ Over recent years, the Scottish Government has published a number of strategic documents and plans aiming to improve diet and reduce obesity levels.

There is wide agreement that school food policy has an important role to play in provision and promotion of a healthy diet amongst Scottish children and young people. The Schools Health Promotion and Nutrition Act (Scotland 2007) has built on earlier policies such as Hungry for Success⁶ to embed school based provision and promotion of healthy food and drinks into legislation.⁷ The most recent Scottish Government (SG) publication, 'Preventing Overweight and Obesity in Scotland: A route map towards healthy weight' states that one of its priorities will be to control exposure to foods that are high in energy.⁸ Examples of preventative actions include: *"Exploring measures to restrict access by children to nutritionally inappropriate meals and high energy and energy-dense foods from businesses located in the vicinity of schools."*

Glasgow City Council provides a broad spectrum of initiatives and services designed to provide and promote healthy food and drinks throughout all Glasgow schools during the school day. Previous research and evaluation has shown that these programmes and initiatives have had a positive impact on pupils' attitudes and behaviour in relation to healthy eating and they have been well received, particularly within the primary school sector, by pupils, parents and school staff.⁹

In contrast to the primary school sector, changes to school food policy and practice within secondary schools have been more difficult. Increasing numbers of secondary school pupils are leaving school premises at lunchtime to purchase food and drinks high in fat, sugar and salt from high street food outlets and mobile vans.¹⁰ Nonetheless, qualitative research conducted by the Scottish Centre for Social Research (ScotCen) with primary and secondary pupils and parents found that, despite their reservations about the changes to school based provision of food and drinks, pupils and parents thought that healthy school food provision and promotion was having a positive influence in school and at home and that it should continue.^{11 12} One of the recommendations from the research, discussed at a research seminar in 2007, was that a pilot exercise to encourage secondary school pupils to remain on the school premises at lunchtime should be considered after consultation with relevant school staff and pupils.¹¹

BACKGROUND

Glasgow City Council (GCC) Education Services in collaboration with other stakeholders in the school sector, decided to implement a pilot initiative (Glasgow's Big Eat In) in eight secondary schools in Glasgow, commencing in August 2009 and running for a full academic year. A steering group was established with representation from GCC Education Services, Cordia (formerly GCC Direct and Care Services), Culture and Sport Glasgow (CSG), Glasgow Centre for Population Health (GCPH), and NHS Greater Glasgow & Clyde (NHSGGC) to plan, implement and evaluate the initiative.



The aim of the Big Eat In (BEI) was to encourage secondary one (S1) pupils to stay within the school grounds at lunchtime to eat a healthy lunch and participate in a lunchtime activity. Eight secondary schools located in different areas of Glasgow volunteered to participate. Preparatory work was conducted with secondary school pupils, parents/carers and school staff in the schools involved in the pilot as well as with upper primary pupils, parents/carers and school staff in associated primary schools.

Publicity accompanied the launch of the pilot at which the Leader of GCC pledged his support for the initiative. Information leaflets were issued to parents/carers prior to the end of the 2009 summer term. Taster sessions were organised in many of the associated primary schools to allow parents/carers to sample menu items offered by the school meals service

and primary seven pupils had the opportunity to have lunch in their future secondary school canteens during orientation visits to their respective schools.

Each pilot school drew up its own individual implementation plan, establishing a package of initiatives to provide a positive incentive for S1 pupils remaining on the school premises. Initiatives varied from school to school and included recreational physical activity, sport and lunchtime clubs, as well as provision of access to school libraries and informal social space.

RESEARCH AIM AND OBJECTIVES

In order to assess the impact of the pilot in the participating schools and to inform future school food policy and practice, an accompanying evaluation was conducted by GCPH and a research team from ScotCen. The aim of the evaluation was to assess the impact of the pilot on secondary pupils' attitudes and behaviour regarding their lunchtime experience, school meals, and healthy eating and elicit views of parents/carers and school staff regarding the pilot.

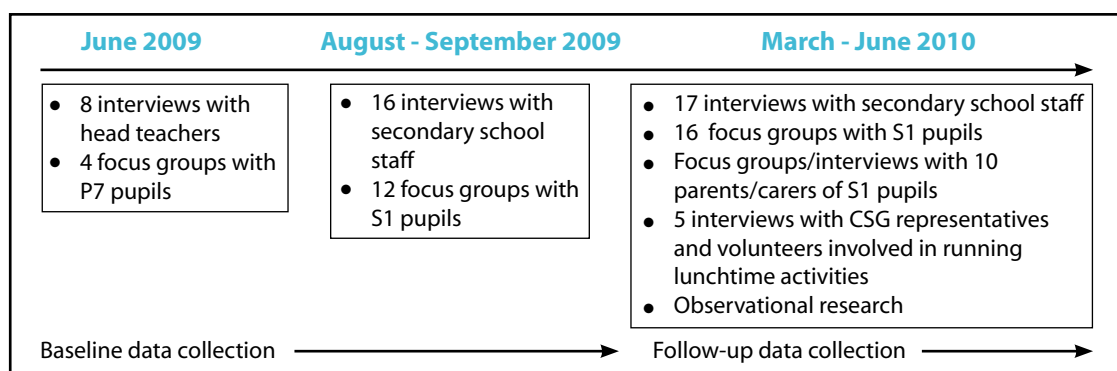
Objectives were as follows:

1. To explore the impact of the BEI on:
 - a) School meal uptake
 - b) Pupils' attitudes and behaviour relating to school meals and healthy eating
 - c) School staff members' and collaborating partners views regarding pupils' attitudes and behaviour, the management of school lunchtime and the sustainability of the approach
 - d) Parents/carers views and opinions regarding school lunchtime policies
2. To identify differences in the approach used by pilot schools
3. To ascertain what worked well or less well

APPROACH AND METHOD

Data were collected and analysed using both qualitative and quantitative methods. The qualitative evaluation was conducted by ScotCen. Baseline and follow up data were collected from pupils, school staff and partners in each school using a variety of methods including focus groups, face to face, and telephone interviews. Staff interviewed had a strategic or operational role and included: head/depute head teachers; S1 heads; PE teachers; CSG representatives, volunteers, catering managers and catering staff. Parents/carers were interviewed as part of the follow up data collection.

The qualitative research design and time line is shown below.



The quantitative evaluation comprised the collection, collation and analysis of school meal uptake data by year group during the course of the pilot for each school from the beginning of September 2009 until the beginning of May 2010. Data were collected by Cordia; collation and analysis was conducted by GCPH. Uptake data for 2008/09 were also collated and analysed for each school to allow comparisons with the previous academic year. Data were aggregated for the eight schools to examine and present overall trends and patterns.

ScotCen also conducted observational research during May/June 2010 to gain a picture of the different approaches utilised and to identify any unexpected consequences.

Dimensions included in the observation were:

- Presence of burger/ice cream vans in close proximity to the school gates; volume of pupil customers; and type of food sold
- Presence of other food outlets in close proximity to schools
- Approaches used by schools to encourage S1 pupils to stay on the school premises at lunchtime
- Types of lunchtime activities offered
- Management of lunchtime in canteens, including queuing systems

Two members of the research team visited each of the eight schools at lunchtime on an agreed date (between May and June 2010). Using a proforma developed by the evaluation team and approved by the steering group and pilot head teachers, one researcher observed the internal school environment (canteen, associated lunchtime activities), while the other focused on the external school environment (school gates/grounds, burger vans, local shops, etc). The researchers made notes immediately after their observation session, and then typed these up more fully.

 RESULTS**Observational findings**

Observational findings are presented first even though data were gathered towards the end of the pilot as they provide helpful contextual information regarding approaches used in the implementation of the BEI as well as a valuable commentary on the physical and social environment in and around the pilot schools.

External school environment

At the beginning of the pilot, it was clear from participant responses that schools had used a spectrum of models of implementation of the BEI, ranging from fairly strict enforcement to encouragement and promotion. Even in schools using more of an 'enforcement' approach at the beginning of the pilot, there was little evidence towards the end of the pilot of active policing of school gates by school staff to prevent S1s leaving. For those schools using an encouragement approach, school staff considered that participation should be voluntary rather than compulsory.

Seven schools had a burger and/or ice cream van situated outside the school and these were said to be very popular with pupils, and were all described as selling poor quality food, such as burgers, 'Pot Noodles', sweets and fizzy drinks. Most schools had a large number of outlets nearby catering for the lunchtime market, many of which advertised special lunchtime deals for pupils which were often more expensive than school meals. In addition, portion sizes were much larger than in school. Many of these outlets were extremely popular with pupils, and as a result long queues were reported. Also, pupils at times opted to eat at outlets at least 10-15 minutes from the school, with the result that the entire lunch break was taken up with the journey to and from these outlets, with pupils eating and drinking their purchases on the way back to school.

Pupil behaviour was noted to be generally good but researchers highlighted road safety as a potential issue of concern. Many pupils were reported as negotiating very busy dual carriageways and ignoring pelican crossings as they ran to their outlet of choice. This might help explain the reluctance of senior school staff to maintain an exclusion zone for licensed vans in certain schools.

Internal school environment

Observation was largely focussed on school canteens but researchers did also observe lunchtime activities underway.

Canteens were generally bright and spacious with menu choices often displayed clearly on large flat screens. Vending machines and water coolers were present and top-up facilities for swipe cards were situated either inside or just outside canteens. Researchers noted a welcoming atmosphere, with catering staff and other school staff members making efforts to create a relaxed, convivial environment for pupils despite a fairly swift turn over due to limited time. Many catering staff seemed to know pupils by name. Senior members of staff and/or teaching staff supervised at lunchtime, and senior pupils also assisted in one school.

Some teachers who were not supervising ate at the Fuel Zone, but the majority appeared to eat lunch elsewhere. In many schools, the canteen did not appear to be large enough to enable all pupils on the school roll to have lunch at the same time, particularly during a relatively short lunch break. It was also apparent that some canteens were used as a general multi-purpose space.

The Fuel Zones were split into a number of areas providing access to particular menu choices including 'sub' zones (providing baguettes etc), burger bars, 'bake and take' (baked potatoes), hot meals and 'grab and go'. Soup and fresh fruit were also available, with water and milk to drink. Some schools had queuing rotas in operation, with different years having priority depending on the day of the week. In one school S1s were allowed out of class first to ensure they were first in the queue. Most canteens were busy on the day of observation. Younger pupils were visible in large numbers although pupils of all ages appeared to eat in canteens.

The most popular menu choices tended to be burgers, pizza and fish and chips. Vending machines and water coolers did not appear to be used to a large degree. There was some evidence that girls were eating more healthily than boys. Girls seemed to be more likely to add salad to their meal and opt for baked potatoes or vegetables. Pupils generally cleared up after themselves, although occasionally staff supervising would ask them to do so.

Most of the schools had organised activities at lunchtime, although in some cases these were a feature of normal school based lunchtime activities and clubs rather than being directly related to the BEI. CSG staff, community and voluntary sector workers, school staff and senior pupils were observed helping to run activities. These included: art; drama and music activities; youth clubs; access to library and resource rooms, chill-out zones; basketball; football, etc. Attendance varied, and some of the normal lunchtime activities involved different school year groups, although other year groups also appeared to participate in BEI related activities for S1 pupils. All those taking part appeared to be enjoying themselves, and appeared to want the session to go on when it was time to go back to class. Both boys and girls took part, although some of the activities were attended by one sex only.

Quantitative findings: school meal uptake

Figures 1 and 2 overleaf show that S1 school meal uptake rates across the eight schools remained consistently higher during the BEI pilot year than during the previous academic year although there was a downward trend in uptake as the year progressed. Where possible, the analysis took account of shorter school weeks due to holidays or 'in service' days but some fluctuations in uptake rate are still noticeable, particularly in Figure 1. There was also some individual variation in uptake rates between year groups from school to school – these data are reported elsewhere.

Figure 1

Comparison of S1 Rate of Uptake, 2008/9 and 2009/10 (Aggregated data from 8 pilot schools)

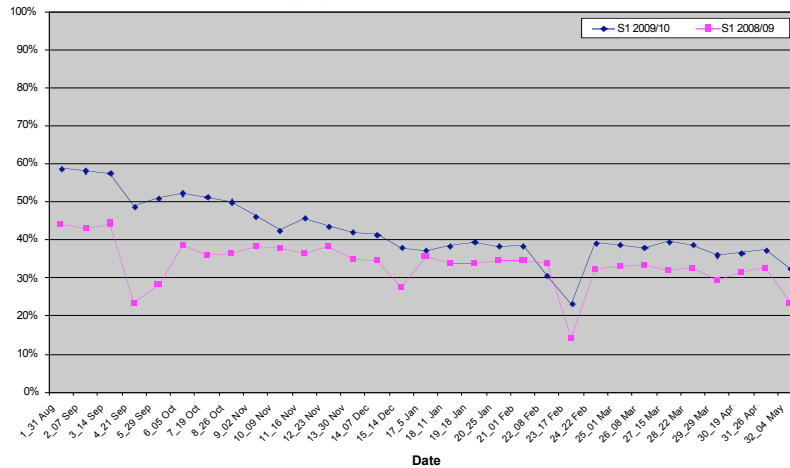


Figure 2

S1 Average Uptake by Term (2008/9 and 2009/10)

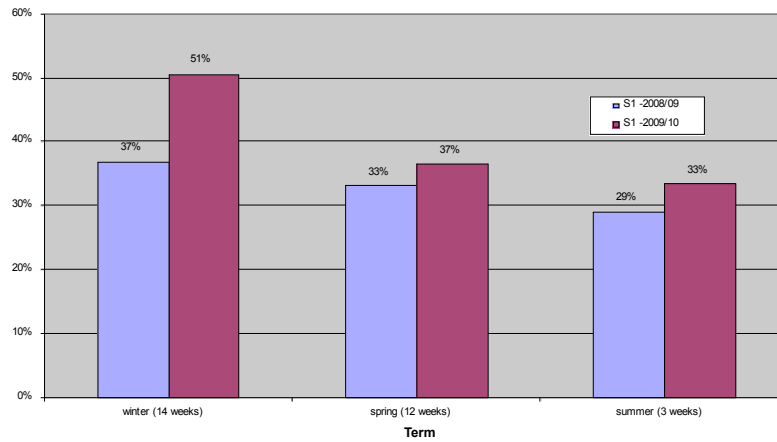


Figure 3

Combined Rate of Uptake by Year Group, 8 Pilot Schools, Aug 09 - May 10

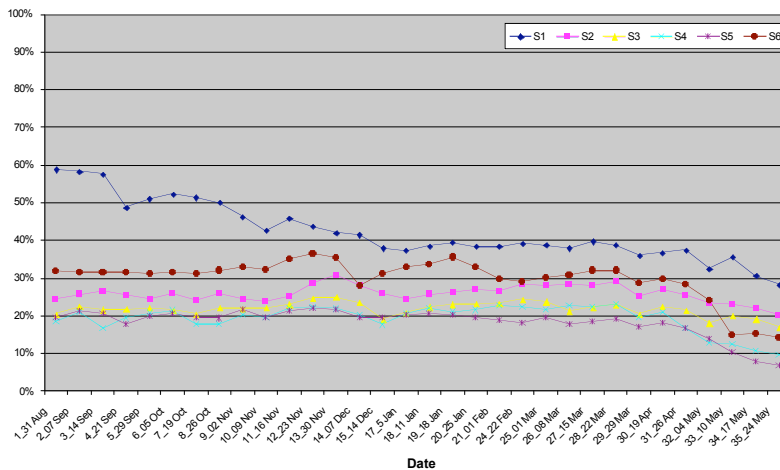


Figure 3 shows that S1 uptake rates remained consistently higher than all of the other year groups over the course of the pilot. It is interesting to note that S6 uptake rates were second highest until the beginning of May 2010 when rates dropped which is possibly unsurprising given that this year group would be leaving school at the end of the summer term.

Overall, quantitative analysis provides clear evidence that implementation of the BEI resulted in an increase in S1 school meal uptake rates in relation to previous years and in relation to other year groups.

Qualitative Findings

Baseline results

a) P7 pupil responses (prior to implementation of BEI)

P7 respondents expressed mixed views regarding the prospect of participating in the BEI in their respective secondary schools. Some respondents thought that staying in school would enable them to get to know their new school more quickly and that they would be punctual for afternoon classes. They also thought that staying within the confines of the school would be safer and that the food available would be better. There was general support and enthusiasm for the healthy menu as the following quotes illustrate:

A healthy school is a happy schoolThe toasties are well better up there....And the baguettes an' that.

You get a much, much wider choice o' the food coz there... You can get a sub if you want as well.

You can make your own sandwich or you can get something hot.

Negative views centred on the lack of freedom in being allowed to leave the school grounds. This was felt to be unfair, as previous S1 year groups had been allowed out. Some pupils were also disappointed not to be able to visit the vans outside the school gates, although peers pointed out that it would be possible to ask older siblings and friends to bring food and drinks back in from such outlets.

It's no fair cause like the first years before us they never got kept in an that but in a way like we're going to be fitter than all them but it's no fair cause they're going oot and they're getting what they like an that and then some people might no like it from the Fuel Zone.

b) S1 pupil responses (at baseline)

Overall, the BEI was generally very well received by pupils at the beginning of the pilot and there did not appear to be an increase in the number of packed lunches being taken into school as a result of the initiative. Healthy eating, taking part in physical activity at lunchtime and safety were highlighted as important benefits by pupils.

Because you get... the kids into activities and if you do it one week then you get to go and do it the next week, and then the next week, so... its like you have got a wee plan of what you want to do...

Just so they can eat healthier food instead of always eating like chips, curries, and noodles and all that.

Basically it's just for your health... the Big Eat In, because it's helping you stay fit and healthy, but then its also helping you keep safe as well so...

Not all pupil respondents liked the lunchtime menu observing that food served in the canteen could be bland and tasteless, and that although there were a number of options available, these did not tend to vary much. As one focus group commented:

Don't know.... Dinnae like them.....Coz the taste... Thought they were manky... Because it's always healthy and it's the same menu all like over and over... And it gets pure boring coz like it's always salad an' healthy stuff... And even if you don't like anything else, you have to get that every single day coz you don't like anything else.

Pupils' views about the amount of information received varied; some stated that they had been given sufficient information but others claimed that the information provided had not been clear. Some pupils reported that they were not given any information by their primary school, and they did not know that the BEI would continue to operate after the first couple of weeks of S1.

Em when we came we didn't think that it was going to be the full year, we thought it was just going to be a couple of weeks, they didn't really explain that to you.

c) School staff responses (at baseline)

As with pupils, many staff respondents were positive regarding the quality of food in school canteens at lunchtime.

I think there's a fabulous quality, I think there's always improvements that can be made and I think they've been made over a couple of years, certainly my experience of working in another Glasgow school is that it's constantly reviewed,... and I think you know my observations of downstairs for the Fuel Zone is that you know they're meeting all the requirements that they have to meet and there's a huge range of healthy options that children have.

Different models of implementation were used in the eight participating schools. Some school staff members felt that it had to be made clear to S1 pupils that they were not allowed outside the school at all at lunchtime, and the gates were actively monitored, whereas others argued that the pupils should be encouraged to stay in the school by making the lunchtime experience as pleasurable as possible rather than using enforcement measures.

Lunchtime activities were run by school staff, CSG staff, volunteers and pupils. Resourcing school lunchtime activities was seen as problematic by some school staff and, in some schools, there were clear differences in expectations between school staff and CSG staff regarding the role of CSG in providing resources and input. However, a wide spectrum of activities was offered in participating schools, ranging from physical activity (sports, aerobics, etc) to art classes, library and ICT.

At the moment we have got...basketball, dodgeball, badminton, football, and fitness so that's like our five lunchtimes. There is one of them each lunchtime and we are going to add in gymnastics, and a kind of fitness DVD type thing, a more aerobics type thing so there will be two things on a couple of days.

Negative views expressed by some staff regarding lunchtime activities (apart from resource issues) were that the school lunch break was sometimes perceived as too short to accommodate the consumption of a school meal and participation in an activity, the school lacked sufficient space to carry out activities (and there could be overlap between the eating area and main social space) and pupils were sometimes late for afternoon classes if an activity overran. However other respondents took the opposite view proposing that pupils tended to be punctual for afternoon classes (and arguably more relaxed) as they had not left school during a relatively short lunch break.

Other positive impacts of the BEI that were reported at baseline by staff respondents included the development of a more social, relaxed environment in the school canteen (in one of the pilot schools in particular), and a view that catering staff would remain in employment if the perceived increase in school meal uptake was maintained.

Negative impacts of the BEI at baseline included a perceived lack of resources resulting in school staff losing time off during lunchtime if they helped with any aspect of the pilot, and a concomitant inability to have monitors placed on the school gates. Pupils who ate outside school from vans and local shops were thought to eat almost exclusively unhealthy options, with 'Pot Noodles', chips and curry sauce, burgers and fizzy drinks mentioned as favourite lunchtime choices. As one respondent commented:

Oh, the quality o' food's terrible. Really, really bad. It's a van that provides hot rolls, but he's not got facilities for hot rolls. He makes them in the house and brings them up. I don't know how he keeps them warm. And there's no handwashing facilities or... so he's takin' money an' servin' food. I've been on to Environmental Health, and so has... the Head Teacher... but they're still there.

Follow Up Results

a) S1 pupil responses

The majority of pupils remained positive about the BEI towards the end of the pilot. Some respondents thought they would have left school at lunchtime if the BEI had not been operating. There were a few examples of pupils trying school lunches and being won over as the following response illustrates:

One of my friends was always bringing a packed lunch because they didn't really like the school dinners in primary, and they didn't really try anything, then they came up to secondary and they realised that some of the stuff was really quite nice. And now that's got them trying new foods...

There were mixed opinions on what the pupils would have done if the BEI had not been run in their schools. Some pupils said they would have stayed in to have school lunches, some would have gone out occasionally, and some would have brought in packed lunches.

Most of the pupils praised school lunches for the choice of food on offer. Pupils enjoyed a good selection and were able to pick what food they wanted, with the option to add additional salad or vegetables to their meal. Others liked that the fact that the menu changed daily, which meant they were less likely to get bored with the food on offer.

I thought the really good point was like when you go for something, like you thought "Wait. I'm a bit hungrier", and then there was like the salad. You could get beetroot an' all that, like so you could just go there and take... like think that that could dae me. Like just take your plate up. But I thought that was really good that there was more to take.

In addition, school meals were viewed as being good value for money (average price was £1.15), of quite good quality, and healthy. It was noted that there was very little if any salt or sugar in the food with healthy options such as salad, baked potatoes and fruit with milk or water to drink. The food on offer encouraged pupils, who might otherwise have eaten outside school, to buy lunch from the Fuel Zone.

Because like a lot of the stuff's like freshly made so like you know what's going into it and there's no anything like extra salt or that in it...

It's good cause like basically everything's gone by break time... And it's like encouraging us to eat more healthily

Lunchtime activities were considered to be one of the best aspects of the BEI as they gave the pupils something to do with their friends at lunchtime. There was also a good selection of activities available at most schools that were well attended, and that those attending appeared to enjoy greatly. The following quotes illustrate one focus group's opinion on the best aspects of the BEI:

...you get to have a laugh and all that and you don't need to just go outside in the cold, you can actually do something at lunchtime.

You get to choose what you want to do. You can go up to the library, you can go into the gym hall, you can play badminton on a Monday and all that.

Pupils acknowledged that there were positive effects of staying in school. Many pupils seemed to become accustomed to staying in school over the course of the BEI and felt that they did not have to go out if they did not want to. It was also added that it made it easier to avoid peer pressure, and also possibly made bullying and teasing of those who wanted to remain within school less likely.

b) School staff and collaborators' responses

Staff respondents reported that there had been many positive impacts of the BEI throughout the pilot year. They cited the improved safety offered by the pilot, as well as the fact that it reduced the opportunity for lateness and truancy, and allowed the S1s to socialise more. It was also said to allow teachers to engage with pupils more, and monitor the S1 pupils perceived as being most vulnerable. The majority view over the pilot year was that the uptake of school meals had increased; and more S1s in particular had been eating in the canteen than in previous years. It was also said, though, that it was difficult to gauge uptake accurately as pupils often shared their swipe cards. However, uptake of school meals was seen to vary from day to day depending on what was on the menu.

Nevertheless, the pupils eating within school were said to be having a nutritious meal, of good quality. Also, catering staff were said to change the menu as a result of pupil feedback and this, allied with encouragement of staff, was thought to promote use of the canteen.

..So even if we're not managing to get them all going to the Fuel Zone, some of them are bringing packed lunches and so on but the message about nutrition, value et cetera is, it's across, it's getting across. And yes I would think the more pupils are going to the Fuel Zone than would have gone under normal circumstances.

The lunchtime activities in the majority of pilot schools were reported as being very popular and well attended. Overall, improvements in links with CSG had been noted as the pilot progressed. In many of the schools, activities were run with the help of school staff members. It was pointed out that many staff members were happy to give up their lunchtime as the pupils enjoyed the activities. Indeed, in one school, about 10 members of staff were involved in running activities. Schools had also forged links with volunteers and trainers working in the community, as well as allowing senior pupils to help facilitate sessions. As a result of these other growing collaborations, it was thought more likely that the activities would become sustainable over time.

So we're finding that the children are really quite enthusiastic about the activities, too enthusiastic. We can't meet the demand in some cases, so we've started these rotas, but they really quite committed to coming along.

CSG respondents gave examples of a wide range of activities which they considered were enjoyed by pupils across most of the pilot schools. These lunchtime sessions were run by CSG staff, volunteers, paid coaches, school staff and senior pupils. Activities ranged from drama classes, 'Wii' sports, relaxation classes/chill-out zones, football, basketball, play pods, playground equipment, library sessions, IT clubs, etc. In many cases these had been well attended by S1 boys and girls over the course of a number of weeks, and occasionally they had been extended to pupils in other secondary years as they had generated a great deal of interest.

A minority of school staff respondents thought that numbers attending the canteen had decreased over the course of the school year, as visiting outlets outside school and the consumption of packed lunches had become more common. In addition, it was claimed that takings were down within a few schools as a result of this trend, as well as the decreased popularity among pupils of vending machines due to the predominantly healthy food that was on offer. The consensus, even in schools in which pupils taking lunches was perceived to have increased, was that larger numbers of S1s were buying lunch outside school as the pilot progressed. Disappointment was expressed as a result of this as efforts had been made to encourage S1s to stay in school and also to promote activities and an environment that was appealing to pupils. However, schools' lunchtime restriction policies tended to become more lax as the pilot progressed through the academic year.

In some schools, the canteen and lunchtime environment were felt to be off-putting for pupils. Queues, lack of time and space, lack of seating, decreased food choice for those towards the end of queues and increased number of younger pupils displacing older pupils were all thought to reduce school meal uptake, as indeed was the fact that not all pupils liked the food on offer. A few catering staff respondents said that supervision could be a problem during lunchtime.

The catering staff members felt that they were not always able to provide the types of food that the pupils wanted, due to nutritional regulations. This could result in some pupils bringing in their own cans of juice from the van because they did not like the juice the school supplied, or 'voting with their feet' as they found the school food to be bland with lower fat, salt and sugar content. Some catering staff felt that the attempts to mimic the fast food on offer outside the school did not always work, and that the quality of food was also dependent to some extent on those supplying it.

... we do do burgers. They're healthy burgers, but they're that healthy they're horrible! I mean, you know, you've taken everything out of them. There's no fat in them...

I think the quality... depending on the supplier as well, you know? Some... sometimes it's good, and other times it's not. ... you've to monitor it all the time, you know what I mean?

Catering staff reported that external food outlets, including vans, in close proximity to the school gates undermined the pilot. As was reported at baseline by school staff respondents, the consensus was that pupils who ate outside school almost always chose the unhealthy options.

...They're going out to buy burgers or they're going out to buy those noodles which are absolutely horrible.

...they would still rather go to the van and buy a cream bun. And the amount o' sweets they buy is unbelievable. The amount o' rubbish we clean up... That's all you see in this school, is bottles o' Irn Bru, because they're buying it off the van first thing in the morning, and that's all we clean up.

c) Parent/carer responses

Parents/carers were generally very positive about the BEI, particularly in relation to pupil safety. Many felt that S1 pupils were too young to be outside school at lunchtime and were concerned about the risk of injury from road traffic, getting into fights and stranger danger. The knowledge that their child was in school at lunchtime reassured them. They also regarded the BEI as providing an opportunity for pupils to socialise and make friends in a safe, structured environment. As one parent said:

Well I know exactly where my daughter is at lunchtime.....I'm not kind of left wondering 'oh is she at the shops or has she went to a friend's house' or whatever...So from a parent's point of view it's peace of mind.....

A small number of parents also commented that the BEI reduced peer pressure to leave school at lunchtime.

...I know that X wanted to stay in at lunchtime anyway but maybe some of her other friends might have been going out but the fact that the teachers are encouraging them to stay in it's kind of taken the emphasis off her, she's kind of able to say 'well the teachers would prefer us to stay in so this is just what I'm going to do.' So it's kind of taking a wee bit of the pressure off her.

Many parents did not have much knowledge of what food was on offer at lunchtime; however, those that were aware generally praised the food on offer and considered it to be good value for money. It was felt that there was a good choice and that the meals were healthy. It was also reported that the BEI was creating greater awareness amongst young people of the importance of eating a healthier diet. Furthermore, the activities were viewed very positively by parents as they were said to give pupils a chance to try out something new while meeting other pupils.

..it's an opportunity... to maybe speak to people that's not in their class. You know? ...They maybe find that they go to play football and they've seen somebody in the football... and that's, again, a social aspect I think more than anything else.

A minority of parents were less positive about the food, voicing concerns about the appropriateness of the lunchtime menu even though it was recognised as good value for money. For example, it was said that the food was almost too healthy and therefore alienated pupils if they were not used to foods low in fat, sugar and salt. Some parents

thought that there was not enough variation in menu choices and that their children quickly got bored of the food on offer. Queuing and lack of availability of the most popular food options were also cited as concerns.

F1: *when there is something nice on the menu... He likes the fish. Now .. and he says unless you run ..*

F3: *...you don't get that. It's gone.*

M1: *Aye. It's gone. Aye.*

F1: *...it's run oot coz there's no enough provided for the amount o' kids that's in this school.*

In relation to the activities, a few parents felt that there were not enough activities which appealed directly to girls, such as singing or dancing.

F2: *...more activities for girls... you know? Things like that.*

F1: *Aye. Because these activities, as you've just pointed oot – the sports, the football – they are basically boys. Girls... Very very few girls are interested in kicking a football about the park...*

Parents considered that the availability of unhealthy food and drinks from vans and shops in close proximity to the school was a major disincentive to their children eating in school at lunchtime.

They're doing away wi' the machine. They're no getting sweets in the machine. They're getting healthy drinks, healthy crisps, but then they just walk 20 yards oot and get to a sweetie van.

Some parents felt under pressure to provide their children with the same amount of money that their friends were receiving and they recognised that they themselves, either by writing notes to allow their child to go out at lunchtime or by providing additional funds to eat outside could undermine the BEI. It was also argued that as the year passed, children began to argue that they should be allowed to leave school at lunchtime for increased freedom and responsibility.

Well, he's just started it, so now he's pushing 'Can I get oot once a week? Can I get out twice a week? Once a week, let me oot', and I'm gonna eventually have to say 'Yes' to that.

Not unexpectedly, those parents who wanted their children to eat school lunches were very much in favour of the BEI and also pupil participation in the lunchtime activities. These respondents indicated that they encouraged their children to stay in school, and in some instances they prohibited them from leaving school at lunchtime and refused to give them money to spend in shops and vans.

Some parents thought that an 'enforcement' model imposing a blanket ban on pupils going out at lunchtime would be more straightforward than the more prevalent 'encouragement' model.

If they tell them that they can't go out, there's no exception. You know? They have to take part in the Big Eat In. They have to stay in. But this... saying one thing and meaning another You know? Like if they're told that... the first years can't go out, well why say... 'if you bring a letter in ... so that you can go out.' So I don't agree wi' that.

It was apparent that some parents knew very little about the BEI, with their children reporting only snippets of information (if at all). Many parents felt that if they had been better informed about the pilot (food available, activities etc), through a letter in the post (not school bag) or through information on the school's website, they would have encouraged their child to participate by suggesting meals that they might like to try or by helping to choose an activity. A leaflet explaining the rationale behind the BEI or asking for parental support would have been warmly received. Parents suggested that this information should be provided in the future.

THE FUTURE OF THE BIG EAT IN

Pupils' views

Most pupils felt that the BEI should continue for S1s (but not other year groups) using an 'encouragement' rather than 'enforcement' model. It was regarded as being successful, safe, good for health and enjoyable. Pupils were also aware that their parents valued the safety aspect. Most groups were in favour of the BEI being extended to other schools in Glasgow but considered that it should be restricted to S1 pupils due to practical constraints such as size of school canteens, length of lunchtime etc. The following quote illustrates one focus group's response to a question regarding whether or not the BEI should be run in other secondary schools in Glasgow or Scotland:

Yeah. Definitely!... To let them see how it is, how it's more safe because like most other schools it's quite dangerous going outside, like sometimes the area and stuff, so they should try it and see how it works.

Basically it's just for your health... the Big Eat In, because it's helping you stay fit and healthy, but then it's also helping you keep safe as well so.

Support for the continuation of the pilot was not unanimous: pupils from two schools were less positive and one group convened in each of these schools concluded that the BEI should be stopped, although the lunchtime activities should continue. Otherwise the pupils called for the pilot to be extended across Glasgow at the very least.

Many pupils who supported the continuation and potential extension of the BEI to other schools suggested modifications to the approach including better quality food and drinks, shorter queues, longer lunch breaks and more equitable access to lunchtime activities.

Staff views

Staff respondents were generally positive about the BEI, and saw many benefits with such a model running in schools. Some conflict was expressed between the contrasting approaches of active restriction or encouragement of pupils to stay on site at lunchtime, but the consensus was that pupils could not be forced to stay in at lunchtime, and that promotion of the BEI was the way forward.

(Big Eat In should continue) because I think if we don't do something, we're letting ourselves in for big, big, big problems later on ... when they get older. And the obesity rate in Scotland and... we're no very healthy as it is.

The minority who favoured the restriction model were concerned that numbers would eventually dwindle in school canteens and catering jobs could be put at risk. However, there was broad agreement that schools faced an uneven playing field in terms of competing with vans and fast food shops which were still able to target school pupils with unhealthy options, usually in very large helpings, and often in very close proximity to the school gates. There were suggestions made to ban the vans, or for the current licensing policy imposing

a 300 metre exclusion zone to be strengthened which could address this in some way, but it was also acknowledged that the food consumed by pupils at home was likely to be much less healthy than the food and drink provided within school. As a result a few respondents suggested that the current approach to meeting nutritional guidelines should be relaxed to some extent.

The school staff argued that the involvement of parents was very important if initiatives like the BEI were to succeed, although this was perceived as being a major challenge. For example, it was suggested that there should be more taster sessions, parent evenings or sessions, and information in the form of letters, leaflets, and newspapers, even if these attempts to engage with parents had been relatively unsuccessful previously.

Well I mean some kids it's the way (they are) brought up, they're not taught healthy eating, its just a case o whatever, I mean I know one wee boy myself... I don't think he's ever had meat, potatoes and veg, you know what I mean so I think that, if you get them young for their healthy eating I think aye they'll continue when they get older, I do think that.

Other suggested changes included the introduction of staggered lunch breaks, in order that S1s would be able to eat their lunch and take part in an activity, as well as reducing the pressure of numbers in the canteen. A number of incentives for pupils staying in school and eating school lunches were also proposed. Continual review of the food on offer within school, and the opportunity for pupils to provide feedback on changes that could be made, were said to be common practice within schools already but it was a process that seen as important to continue.

Lunchtime activities were said to be an integral part of the BEI, but issues such as staffing, funding and sustainability had to be considered. Schools which reported a difficult relationship with CSG called for improved links to be made, and for more activities to be laid on for pupils. Activities would also arguably only become sustainable if the funding and staffing (including the use of volunteers) issues were resolved, and importantly if pupils from other years could also take part in these activities in the future.

I think as well what would help us is if the National Government passed legislation that said to parents that 'you're duty bound to ensure that your child remains inside the school grounds until the end o' 2nd year'. Now I know there's a very small number/small percentage of young people who will directly defy such an announcement from the Government, as they're doing just now with the nutritional value, but the vast majority of parents would actually conform... if there was some way of rewarding young people for doing the right thing, that would be helpful. I'm not saying that offering a reward is gonna get them all back in again, but it might get 10% or so back at the thought of a reward, and actually if we could get the numbers up to 10% I'm sure we'd be delighted.

I think it's all very well for our city to say "this is what we need, this is a great idea", but not (provide) any additional resources. So to run the Eat In with existing resources I think is a bit... not naughty, but it's a... it's a bit difficult for us then to say, Well, ... what activities do young people do?

The majority of staff respondents perceived that the BEI had been successful overall, the benefits outweighed the drawbacks, and there was merit in its continuation within the pilot schools and its extension to other secondary schools. As has been mentioned, active restriction of S1s leaving the school gates at lunchtime was deemed as being impractical and inadvisable by most respondents. There was some support for encouraging S2s to stay in school at lunchtime too, but the consensus was that space and time were too limited to target years other than S1. The provision of healthy lunches, the safety agenda and the perceived benefits of the activities were all thought to contribute to the qualified success of the pilot. Respondents from two schools of the eight pilot schools were less positive, and one staff interviewee from one of these schools said that the BEI was unsuccessful, and should not be continued.

Views of parents/carers, CSG staff and volunteers

Parents/carers felt that the BEI should be extended to other schools across Glasgow and Scotland. They felt this might also make it easier for pupils to accept this type of lunchtime policy if they realised that pupils at other schools were treated in a similar way.

On the whole, parents/carers thought that the BEI should only apply to S1s due to their age and to provide protection and support to allow them to adapt to secondary school. From a practical viewpoint, parents felt that many schools did not have the capacity to accommodate all pupils in the canteen at the same time. In addition, they argued that it was important for their children to have responsibility and freedom so they should be allowed out at lunchtime at some stage in their school careers.

I think the whole idea of coming to secondary school is that they're a big person now you know that you only had packed lunches really when you were at primary school and you were a bit of a baby if you like... Em you were too young to be responsible with your money to actually go and physically buy your lunch but I think when you come to secondary school it's .. you know you're a big person now and you have to take responsibility for this...

CSG representatives and volunteers favoured the continuation of the activities element of the BEI at lunchtime in the pilot schools, even if they were not always able to comment on the school lunch component of the pilot. Ideally, it was also stated that the activities should be offered to other secondary pupils within the same school, as well as to pupils in other secondary schools in Glasgow. However, it was acknowledged that there may not be the resources – staff or volunteers and finances – to allow such an extension of the activities. The CSG representatives, in particular, were concerned that the model should be sustainable in the future, and it would send out the wrong message to S1 pupils if they were no longer permitted to take activities they had enjoyed during the pilot in S2. On the other hand, if the BEI were to be extended to other schools, they did not think it would be possible to run activities with S1 pupils in additional schools whilst extending the programme in existing schools.

I think there has probably been quite a lot of success in it; um... I think there is probably more to come because people now have a much better understanding. I would say there is a number of pupils out there that have engaged in activities that they wouldn't have engaged in or even the side of probably maybe never felt confident in going out of the school and that allowed them to build up their confidence for that first year and get used to the school without it being seen that you are the person that doesn't want to go out.

I think you take the model of how we do it in (name of school) and copy it but I think you'd probably would need to have money to provide for the activities, I don't know if every area has like what X's got the voluntary sector that are providing the, the activities, I don't know if every one in Scotland would have that...

CONCLUSIONS

The general consensus of the pupils, parents/carers, school staff, CSG representatives and volunteers who took part in the evaluation was that the BEI had been very successful, should continue in pilot schools and should be extended to other schools. According to the respondents, numbers of pupils taking school lunches had increased (this was confirmed by the quantitative data); the food and drink provided was healthy and mostly of good quality; S1s were able to adjust to the new school environment and felt safe within the confines of the school; and the lunchtime activities were enjoyed by all pupils who took part. Parents/carers particularly valued the safety dimension provided by the pilot in terms of reduced risk of road traffic injury, bullying and stranger danger. The BEI was also regarded as helpful by parents/carers in providing an opportunity for their child to socialise and make friends in a safe, structured environment during an important educational transition.

The aims of the Scottish Curriculum for Excellence are to help children become *“successful learners, confident individuals, responsible citizens and effective contributors.”*¹³ There is good evidence that the BEI supported educational as well as public health goals.

In terms of future approaches, the majority of respondents proposed an ‘encouragement’ model in which S1s would be encouraged to stay within school, eat school lunch and participate in a lunchtime activity. Although some school staff respondents supported more restrictive approaches, especially at the beginning of the pilot, including a blanket ban on pupils leaving the school, the majority view was that this was not only inadvisable but also impractical.

School vans and shops in close proximity to the schools were perceived as undermining healthy eating. A GCC licensing policy was introduced in January 2009, imposing a 300 metre exclusion zone for any mobile street trader operating near secondary schools. As this policy can only be applied to traders renewing or applying for a new license, it had not had time to fully embed before the BEI was implemented.¹⁴ There was clear evidence during the latter stages of the BEI, of vans continuing to operate in close proximity to seven out of the eight pilot schools. It is assumed that these vans were yet to have their licenses renewed and thus were not subject to the new policy. School staff and parents have repeatedly voiced concerns regarding food purchased from these outlets by pupils, as well as expressing worries regarding road safety of pupils visiting these outlets and have called for them to be banned. A preliminary analysis of the impacts of introduction of a 300 metre exclusion zone by GCC Leader’s Office, published in September 2009, recommended that a further review of the policy should take place to determine its practical effect and whether an extension to the exclusion zone would be desirable.¹⁵

The Scottish Government Route Map Towards Healthy Weight has called for policy responses that “go beyond individual initiatives requiring systemic and far-reaching change in infrastructure, environments, culture and social norms.”⁸ Initiatives such as the BEI offer a very promising way forward for policy makers and practitioners to develop further approaches to school-based promotion of healthy eating in partnership with children, young people and their parents/carers.

REFERENCES

- 1 Glasgow City Council. Hungry for Success- Site Survey of Head Teachers. Unpublished report, 2008.
- 2 Lang T, Dowler E, Hunter D. Review of the Scottish Diet Action Plan: Progress and Impacts 1996-2005. Edinburgh: NHS Health Scotland, 2006.
- 3 Harnack LJ, Schmitz KH. The role of nutrition and physical activity in the obesity epidemic in obesity prevention and public health (ed. Crawford D, Jeffery RW), Oxford: Oxford University Press, 2005.
- 4 Government Office for Science. Tackling obesities: future choices. Summary of key messages. London: Department of Innovation Universities and Skills, 2007. <http://www.foresight.gov.uk/Obesity/20.pdf>
- 5 Grant I, Fischbacher C, Whyte B. Obesity in Scotland. An epidemiological briefing. Edinburgh: ScotPHO, 2007.
- 6 Scottish Executive's Expert Panel on School Meals. Hungry for Success: A Whole School Approach to School Meals in Scotland. Edinburgh: HMSO, 2003.
- 7 Scottish Parliament. Schools (Nutrition and Health promotion) (Scotland) Act. Edinburgh: HMSO, 2007. <http://www.legislation.gov.uk/asp/2007/15/contents>
- 8 Scottish Government. Preventing Overweight and Obesity in Scotland. A Route Map Towards Healthy Weight. Edinburgh: The Scottish Government, 2010.
- 9 Glasgow Centre for Population Health. Healthy Food Provision and Promotion in Primary School: What impact is it having on food choices? Glasgow: GCPH, 2007.
- 10 The Scottish Government. School meals in Scotland 2010. Edinburgh: The Scottish Government, 2010. <http://www.scotland.gov.uk/Resource/Doc/317525/0101141.pdf>
- 11 Scottish Centre for Social Research. Healthy food provision and promotion in schools. Final report. Glasgow: GCPH, 2007.
- 12 Glasgow Centre for Population Health. Healthy food provision and promotion in primary and secondary school: impacts in school and beyond. Glasgow: GCPH, 2007.
- 13 Learning and Teaching Scotland website <http://www.ltscotland.org.uk/understandingthecurriculum/whatiscurriculumforexcellence/index.asp>
- 14 Glasgow City Council. Conditions Contained in a Street Traders Licence. <http://www.glasgow.gov.uk/NR/rdonlyres/26F588EB-5D05-4C18-86BA-0525A03B02BE/0/STConditions.DOC>
- 15 Glasgow City Council's Leader's Office. Briefing: Exclusion zones for 'burger vans'. Glasgow: Glasgow City Council, 2009.

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