

Research Bulletin No 7:

School food: top marks discussion and recommendations.



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Introduction

Childhood is a vital stage for good nutrition throughout the life course. It is not only a time of rapid growth, development and activity; childhood nutrition also impacts on adult health and the prevention of chronic diseases such as cardiovascular disease, type 2 diabetes and cancer.¹ A child's diet may be strongly influenced by availability and access to different foods. This availability and access is in turn influenced by a child's environment (at home and at school) and the opportunities they are provided with to taste and eat healthy foods.² Concerns over unhealthy eating patterns and poor nutrition among children led to the introduction of the School food: top marks programme. The programme, launched by the Department of Education, the Department of Health, Social Services and Public Safety and the Public Health Agency, recognises the important role schools play in contributing to childhood nutrition and in developing children's knowledge and skills in relation to making healthier food choices.

This bulletin is the final in a series of seven summary papers detailing findings from an evaluation of the Food in Schools programme³, conducted by the Public Health Agency (PHA), on behalf of the Food in Schools Forum, chaired by the Department of Education (DE). For further information on the research strategy and further information on the seven bulletins please see Research bulletin 1: School food: top marks, research background and approach.⁴

The aim of the evaluation was to investigate stakeholders' attitudes and perceptions of food in schools, including healthy eating and school meals in 2008 prior to the introduction of School food: top marks. This work was replicated in 2012 to examine progress and inform future communication and policy relating to food in schools.

¹ Scientific Advisory Committee on Nutrition SACN: The influence of maternal, fetal and child nutrition on the development of chronic disease in later life. February 2010. Available at: http://www.sacn.gov.uk/pdfs/sacn_early_nutrition_final_report_20_6_11.pdf. Accessed 10 November 2015.

² Food Standards Agency 2007. Low income diet and nutrition survey: summary of key findings. Available at http://tna.europarchive.org/20110116113217/http://food.gov.uk/science/dietarysurveys/lidsbranch/#h_4. Accessed 11 November 2015.

³ Since the completion of this research, a review of the school food marketing and promotion strategy has taken place. Following consultation with stakeholders the school food: top marks programme has been renamed and rebranded to school food (try something new today). The aims and objectives of the programme have remained the same.

⁴ G. Gilmore, K. Beattie. Research Bulletin No. 1: School food; top marks, research background and approach. Public Health Agency, Belfast 2016. Available at <http://www.publichealth.hscni.net>

This bulletin gives an overview of progress made to date, outlining factors that impede or facilitate healthy eating in schools based on information provided by school principals, teachers, chairpersons of Boards of Governors, school catering staff involved in the implementation of the food in schools programme, as well as views from parents and children themselves.

Progress to date

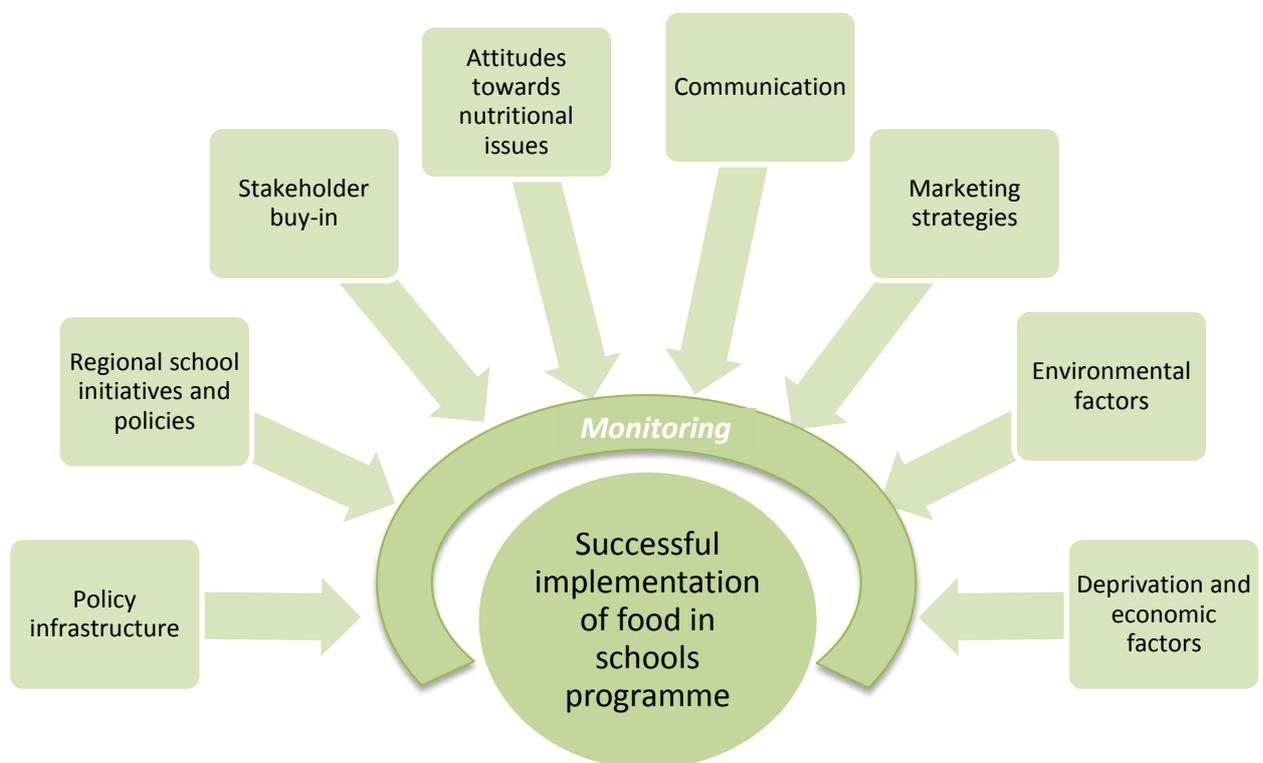
<p>Increased compliance with both sets of nutritional standards</p>	<p>The most recent research in 2012 revealed that most school staff and parents widely support healthy eating in the school environment. In addition, more schools are now fully compliant with both sets of nutritional standards than when the original research was completed in 2008. Full compliance with the nutritional standards for school lunches increased from 66% in 2008 to 69% in 2012; while compliance with the nutritional standards for other food and drinks sold in schools has increased from 41% in 2008 to 52% in 2012 (although remaining lower than that for school lunches).</p>
<p>Improvements in quality of school food</p>	<p>Qualitative data suggests that the quality of food served in schools has improved since the implementation of the nutritional standards in 2008. School catering staff particularly felt the introduction of regulations regarding school lunches led to improvements in the school meals service, and described the positive impact on everyday working practice in school kitchens. Respondents claimed the food now served to children was of a higher nutritional standard. Moreover, it was felt that the introduction of standards had helped raise awareness of the importance of healthy eating in schools.</p>
<p>More primary school children having a school</p>	<p>Uptake of school meals among primary school children has increased since the initial wave of the research, from 35% to</p>

meal than in 2008	44%, thereby providing a larger proportion of children with access to a nutritionally-balanced meal. School meal consumption amongst post-primary children has remained constant across the duration of the research – 40% in 2008 and 2012 respectively.
Most primary pupils having healthy snack at break time	Consumption of compliant foods at break time in the primary sector has remained relatively high since 2008, with 73% of primary children in 2012 consuming compliant items such as fruit or bread products at break.
Fewer primary pupils having unhealthier foods and drinks at break	There has been a decrease in primary children's consumption of non-compliant foods at break time, from 44% in 2008 to 30% in 2012. Primary children consumed less non-compliant drinks over the duration of the research – decreasing from 18% in 2008 to 13% in 2012.
More post-primary children are having a healthy snack at break time	Although post-primary pupils' consumption of compliant foods at break time remains below that of their primary counterparts, findings show increased consumption of compliant foods at break time in the post-primary sector. In 2008, 44% of post-primary children had a healthier snack at break time, compared to 48% in 2012.
Fewer post-primary children having unhealthier snacks at break time	The proportion of post-primary pupils having non-compliant food items at break has decreased, from 58% in 2008 to 53% in 2012.

Issues impacting on the success of food in schools

A summary of the key issues impacting on the implementation of the nutritional standards for school lunches and standards for other food and drinks sold in schools is summarised below. Key themes are organised under distinct headings, as displayed in Figure 7.1, with more detail on each given in prior research bulletins.⁵

Figure 7.1 Key themes impacting on the success of the food in schools programme



5 Seven research bulletins have been produced in total. For a full list of bulletins please see: G. Gilmore, K. Beattie. Research Bulletin No. 1: School food; top marks, research background and approach. Public Health Agency, Belfast 2016. Available at <http://www.publichealth.hscni.net>

Policy Infrastructure

The most recent food in schools policy⁶, reiterates that while mandatory standards limit the amount of high fat, high sugar food items and drinks that can be served as part of a school meal, standards for other food and drinks sold in schools as yet are *not* compulsory in all schools⁷ – and importantly for the purposes of this research - nor is there provision made for food and drinks brought into school by pupils (such as packed lunches, break time snacks or food purchased outside schools).

It is noteworthy that while 69% of principals reported full compliance with the standards for school lunches, just slightly over half (52%) of all principals were fully compliant with the nutritional standards for other food and drinks sold in schools.

The importance of a ‘whole school approach’ was emphasised as key to the success of healthy eating in schools. All those who took part in the focus groups and interviews described the dramatic effect a whole school approach – particularly regarding the types of foods and drinks sold in tuck shops and vending machines - could have on implementing the nutritional standards and on the demand for school meals and other food sold in the canteen. As such, it is important that the implementation of nutritional standards for other food and drinks sold in school is given the same weight as that for school lunches.

Regional school initiatives and policies

A common theme running throughout the research was the unhealthier foods and drinks brought into schools, particularly at break and in packed lunches, compared to

⁶ Department of Education, and Department of Health, Social Services and Public Safety. 2013. Healthy foods for healthy outcomes: A Food in Schools Policy. Available at <https://www.deni.gov.uk/articles/food-schools-policy>. Accessed 10/11/15.

⁷ Due to a gap in existing legislation Nutritional Standards for Other Food and Drinks in Schools are not mandatory at present in the controlled and maintained sectors where food is provided by the school (rather than an Education and Library Board) through tuck shops, vending machines etc. The Department of Education will take forward an amendment to existing legislation to address this gap and ensure that the Nutritional Standards for **Other** Food and Drinks in Schools apply equally to all food provided by grant-aided schools in the school setting. In the interim it is recommended that all grant-aided schools should seek to adhere to the Nutritional Standards for Other Food and Drinks in Schools in line with the “whole school approach” advocated through this policy. Department of Education, and Department of Health, Social Services and Public Safety. 2013. Healthy foods for healthy outcomes: A Food in Schools Policy. Available at <https://www.deni.gov.uk/articles/food-schools-policy> Accessed 9 November 2015.

that sold in school. School catering staff stated that lunch boxes frequently contained items high in fats and sugars. This had two important ramifications – firstly, children who were having packed lunches were not having a nutritionally balanced meal with some children simply snacking on sweets, crisps and fizzy drinks. Secondly, it detracted from the healthy food ethos within the canteen reducing demand and uptake of the school meals service, as children taking school meals were restricted to foods compliant with the nutritional standards. Given the limitations of the current nutritional standards for other food and drinks sold in schools described above, the Food in Schools Forum should support schools to develop regional policies, such as Healthy Break Schemes, on-site lunchtime policies, or in the limiting of high fat, salt and sugar items on school premises to ensure consistent healthy eating messages are delivered to all pupils. To date, such policies have been the remit of individual schools only, and a more comprehensive approach needs to be encouraged. Moreover, thus far, it has been mainly schools in the primary sector who have adopted such policies, despite heavier consumption of non-compliant foods in the post-primary sector. A concerted effort should be made to target children in the post-primary sector evaluating the impact of different policies to determine their effectiveness.

Stakeholder buy-in

Linked to the issue above, a crucial issue is the lack of will to veto crisps, sweets and chocolate either being sold in school, or being brought into school by pupils. Although school staff and parents initially appeared supportive of healthy eating rules, among parents there was a general lack of awareness of school rules about food, and parental understanding of what constituted healthy eating in schools was questionable, especially when it came to preventing children from consuming confectionery items in school. In a similar vein, although the majority of principals (84%) and parents (78%) did support a ban on fizzy drinks in schools, less than half of principals (45%) and parents (43%) thought that crisps, sweets and chocolate should be prohibited in schools.

This suggests more awareness-raising needs to be done with both parents and principals in terms of fostering an understanding of the importance of eating healthy

snacks and foods, and the negative consequences of over-consumption of foods and drinks high in fats, sugars and salt. Principals' unwillingness to enforce an outright ban on these foods should be explored in more detail to ascertain if this reluctance is due to general apathy, concern over parental reactions or a lack of awareness of the corollaries associated with over-consumption of healthier foods. This is an issue underpinning the success of the food in schools policy and requires further research.

Previous policy research has highlighted that the knowledge, attitudes and skill sets of a variety of key groups and individuals including parents, children themselves and school employees, are important in influencing children's nutrition choices⁸; yet this research has demonstrated that a large minority (47%) of principals intimated that they would not or might not encourage uptake of school meals within their school. There is a need for the Food in Schools Forum to work with school staff, including principals, teachers, school governors (where support has been limited) and other key stakeholders to improve 'buy in' to the service. It is suggested that further training is needed in order to make principals and chairpersons of Boards of Governors more aware of the rationale behind the school food: top marks programme, and the importance of good nutrition in childhood. It is also suggested a consultation with all school staff should be established in order to ascertain and tackle any reasons behind this reticence, thus increasing staff motivation to drive forward the food in schools agenda.

Attitudes towards nutritional issues

Although all stakeholders considered themselves to have a relatively good understanding and awareness of healthy eating principles, this was not always translated into practice. A sizeable minority of children have been shown to regularly skip meals, while the majority of children are not eating the recommended portions of fruit and vegetables to maintain a healthy lifestyle. It is important that parents and children are given accurate (and accessible) information outlining the principles and

⁸ Department of Health, Social Services and Public Safety. Fit futures. Focus on food, activity and young people. Belfast: DHSSPS, 2006. Available at www.dhsspsni.gov.uk/ifh-fitfutures.pdf Accessed 4 July 2015.

rationale behind healthy eating. While examples of good practice include the high proportion of all schools delivering healthy eating messages to pupils, and the work currently conducted by primary schools in targeting parents, these messages are not being conveyed to parents of post-primary children. This is of particular importance given that post-primary children generally consume fewer portions of fruit and vegetables, are more likely to consume food and drinks high in sugar, salt and fat, and are more likely to skip important meals, such as breakfast, lunch and evening meal than their primary school counterparts.

A further issue is that most non-compliant items consumed by children in school – and again particularly in post-primary schools – come from the home environment.⁹

Consequently, in addition to the information currently delivered to children, healthy eating information should be developed specifically for parents – with particular emphasis on post-primary children and their parents. These messages should focus on key issues highlighted in the research, namely, *why* it is important that children have regular meals, and do not skip breakfast, lunch or dinner; and the rationale behind the daily recommended portions of fruit and vegetables, as well as ways of incorporating these into children’s diets. Information on healthy snacking, and alternatives to high fat, salt and sugar items for break time provision or inclusion in lunchboxes also needs to be provided.

Communication between key stakeholders

Findings point to a lack of real communication between all groups of stakeholders regarding the issue of food in schools. In order to improve the sustainability of the School food: top marks programme, as well as increasing awareness and knowledge of issues relating to food in schools and the school meals service, it is important that current communication channels between parents, schools and the Food in Schools Forum are improved. The findings suggest that the majority of principals communicate with parents infrequently, with only one in three (34%) principals communicating at least once a term with parents about issues to do with school food.

⁹ The definition of compliant and non-complaint foods was taken from the School food: essential guide. Available at www.publichealth.hscni.net/sites/.../The_Essential_Guide_09_10.pdf. Accessed 02 July 2015.

Consequently, most parents were reliant on their child conveying information about school food issues (56%), while more than one in five (22%) parents did not know what was served in a school meal. Given that up to a third of a child's daily energy and micronutrient intake is provided by school lunch¹⁰, this suggests a need for more effective communication channels between the catering service, schools, parents and children.

Where there was communication between schools and parents, this was most proactive in the primary sector. Primary schools were more likely to actively target parents with healthy eating messages and information than those in the post-primary sector, despite findings that post-primary school pupils are more likely to consume unhealthier foods and snacks, and to bring these snacks into school from home.

In order to identify and tackle problems within the food in schools service, as well as highlighting strengths and areas of progress, schools should implement regular consultation exercises with pupils and parents. At the time of the research, only one in three schools operated a School Nutrition Action Group (SNAG), with membership mainly consisting of pupils and teachers. It is recommended that each school should establish a SNAG or School Council, with representation from pupils, teachers, catering staff and parents. Moreover, these groups should meet on a regular basis in order to raise the profile of food in schools and progress change in this area. Not only would this improve the overall service delivered within each school, but could also help to bolster pupils' support and 'buy-in' for the food in schools service if they feel they are involved in its development. At the time of research, schools were specifically asked about SNAG's; however the function of SNAG's has transferred to school councils. School councils are a means of involving young people in key school issues, and it has been shown that these work most effectively when there is a clear link to the school management team.¹¹ However, by way of caveat, school councils tend to cover a wide remit of school issues, rather than having a sole focus on school food.

¹⁰ Nelson M, Nicholas J, Suleiman S, Davies O, Prior G, et al. (2006) School meals in primary schools in England. London: Department for Education and Skills. Available at www.education.gov.uk/publications/eOrderingDownload/RR753-full.pdf. Accessed 10 November 2015

¹¹ Department of Education circular 2014/4; issued 2 June 2014

Marketing strategies

Only 26% of principals said the top marks logo was displayed in schools and hence limited numbers of children (especially post primary) and parents were aware of the brand, suggesting efforts need to be made to increase display of the top marks logo. In order to raise awareness of the programme, the Food in School Forum should encourage schools to display the logo outside the canteen to allow further dissemination of the message amongst pupils who do not take school meals or eat lunch in the canteen. It is suggested the school food: top marks logo should be displayed in communal school areas, school magazine, school website, and social networking websites, such as Facebook or Twitter.

Awareness of the key resources around food in schools was somewhat limited, despite findings showing that teachers who had used these had found them helpful in their efforts to implement healthy eating policies. The Food in School Forum needs to be more proactive in making schools aware of the resources available, and encouraging schools to utilise these in order to adopt an effective whole-school food policy. The Food in School Forum should continue to work with schools reinforcing the purpose of these practical guides and the value placed on promoting the whole school approach. The Food in School Forum should look to explore different mechanisms to engage with schools to keep them up to date and informed with progress given that only one in three school staff were aware of the Bite magazine.

There is a suggestion that parents may not be getting accurate information about the types and standard of food served through the school meals service. Most parents are not aware of the nutritional standards for school lunches, and the nutritional standards for other food and drinks sold in schools - only 33% and 27% of parents were aware of the respective policies and thereby not aware of the nutritional content of school meals. The majority of those who said they *did* know what was served in a school meal based this on information passed to them by their children, rather than on information provided through school channels or by the catering service itself.

In order to increase awareness and promote healthy eating in schools - and improve the sales of school meals - it is vital that parents are informed of the rationale behind the nutrition standards, and what this entails for food served within their school.

Moreover, parents need to be made aware of the quality and the nutritional value of a school meal, in order to increase the likelihood of switching from packed lunches. In order to improve parents' awareness of the school food: top marks programme and the school meals service, a range of mechanisms should be implemented. It is recommended the programme be promoted via direct contact with parents, for example, actively promoted on parents' nights, and included in the school magazine and school website, with promotional literature sent home with children and/ or mailed out to parental homes. Moreover, menus should be sent home to all parents highlighting the healthy cooking methods and quality of ingredients used in school meals, and highlighting the healthiness of the food on offer.

Environmental factors

Environmental factors continue to play a role in pupils' choice of lunch, as highlighted in the original Food in Schools research.¹² For example, 73% of post-primary pupils felt there were 'a lot of people in front of them' in the canteen or dining hall, and queues were one of the main issues dissuading pupils from eating school meals in the dining hall. Other reasons cited by pupils and catering staff included the limited time allocated for lunch, a fact which could deter pupils from having school meals. It is suggested that the Food In Schools Forum work with schools to identify environmental factors that negatively impact on demand for school meals, and work in partnership to examine ways that issues such as queuing and time pressures can be addressed, such as through the introduction of staggered lunch breaks or re-organisation of dining facilities.

Deprivation and economic factors

This research has illustrated clear patterns linking post-primary deprivation with a reduced likelihood of eating breakfast, break, lunch and dinner and consuming the recommended portions of fruit and vegetables. This would suggest schools should continue to provide accessible and affordable food at school breakfast clubs and

¹² Gilmore G, Gossrau-Breen D, MacDonald L, Taylor L and McGowan L. School food: top marks. A summary report on food in schools research in Northern Ireland. Public Health Agency, Belfast 2010. Available at: <http://www.publichealth.hscni.net/sites/default/files/Top%20marks%20summary%20report.pdf>. Accessed 11 November 2015.

lunchtime, encouraging and making fruit and vegetables available at these times. Moreover, at a general policy level, the possibility of providing free breakfasts for children attending schools with high levels of FSME or those from low income families (similar to free school meals) should be explored. An evaluation of the Free Breakfast Initiative introduced in Wales in 2005 revealed that the provision of universal free breakfasts disproportionately benefitted children from more deprived schools. The evaluation demonstrated a decline in breakfast skipping in schools with higher levels of FSME, and increased consumption of healthy breakfast items¹³

Given that more than one in four (26%) of children attending the most deprived schools do not usually have an evening meal, it is especially important that the uptake of school meals is encouraged - and free school meals in particular - as a way of ensuring that school children (particularly those within low income families) get a nutritionally balanced meal each day.

Another issue raised in the research was the lack of school meal take-up amongst children from schools (especially primary) with a free school entitlement of between 10-20%, with these children potentially missing out on a nutritionally balanced meal. Stakeholders also pointed out that if a parent had more than one child taking school meals this could prove expensive when compared with alternatives, such as packed lunches.

Indeed, price was regarded as one of the main obstacles to increasing school meal uptake by the majority of stakeholders who participated in the research, with over two in five principals (41%) and over one in three (36%) parents considering school meals were too expensive. However, as was pointed out by the catering staff, given the nutritional value and quality of ingredients, school meals actually represent good value for money.

Prices for school meals should be kept as low as possible to maintain or improve take up. It is suggested that loyalty schemes should also be considered, in order to improve demand for school meals, with additional cash benefits or allowances made

¹³ Moore et al. (2013) Impacts of the Primary School Free Breakfast Initiative on socio-economic inequalities in breakfast consumption among 9 – 11 year old school children in Wales. *Public Health Nutrition*, 14 (2), p 219-226.

for families with more than one child taking school meals in order to increase uptake amongst this particular group.

Moreover, it is also suggested that school meals should be marketed in a more effective manner to pupils and parents, emphasising the nutritious and healthy ingredients used, and demonstrating that a school meal represents good value for money.

Monitoring

A key theme emerging from the qualitative research was a lack of effective monitoring, with no external body responsible for ensuring schools adhered to the nutritional standards. Those who participated in the focus groups reiterated the importance of monitoring in order to maintain the momentum of progress to date. It may be speculated that this lack of monitoring impacts on the adherence to standards and therefore the dietary intake of children in school. The most recent obesity prevention framework, 'A Fitter Future for All', launched in 2012 has reiterated the importance of monitoring and implementing the Food in Schools Policy, alongside other initiatives to increase the uptake of school meals, and healthy breaks schemes in schools.¹⁴ In order to maintain and improve adherence to the nutritional standards, there needs to be effective monitoring of food and drinks products sold within schools. Schools should be encouraged to check food and drinks sold both within their canteen and in tuck shops or vending machines fit within the current nutrition standards using the existing school food: top marks checklist. Moreover, unannounced inspections conducted by an independent body or organisation should also be implemented, examining food and drinks sold within the school, with accompanying sanctions for schools who contravene the nutritional standards.

¹⁴ Department of Health, Social Services and Public Safety. A Fitter Future For All: Framework for addressing overweight and obesity in Northern Ireland 2012 – 2022. Belfast: DHSSPS, 2006. Available at www.dhsspsni.gov.uk/framework-preventing-addressing-overweight-obesity-ni-2012-2022.pdf. Accessed 11 November 2015.

Conclusion

This bulletin has aimed to highlight some of the successes and barriers that schools experienced in implementing the nutritional standards and school food: top marks programme. In particular, it identifies the potential adverse impact that external sources of food may have on pupils' healthy eating practices within the school setting. It also illustrates how the accessibility of food and drinks contradicting the standards sold within the school limit the success of these strategies.

This research has demonstrated stakeholders feel the work currently underway in the primary school sector – such as Healthy Breaks Schemes and engagement with parents on the subject of healthy eating – has had a positive impact on children's eating habits. However, difficulties remain in implementing healthy eating practices in the post-primary sector, where children are more likely to miss meals such as breakfast and dinner and simultaneously consume unhealthier food items. Intervention is required with older children to improve their eating habits and enhance the sustainability of the School food: top marks programme.

As key health policies^{15 16} and the findings of this research have demonstrated, the potential contribution that schools can make to children's nutrition can be undermined by other less healthy food and drinks options available within the school setting. However, it is acknowledged that schools can – and do – have a positive influence on children's eating behaviours.

In order to maximise this influence, it is important that whole school approaches are developed and implemented, involving all stakeholders (i.e. staff, parents and children) at the outset. This mechanism needs to be supported by policy initiatives, communication, successful marketing, environmental and economic factors and on-going monitoring – key factors to the successful implementation of the food in schools programme.

¹⁵ Department of Health, Social Services and Public Safety. Fit futures. Focus on food, activity and young people. Belfast: DHSSPS, 2006. Available at www.dhsspsni.gov.uk/ifh-fitfutures.pdf. Accessed 11 November 2015.

¹⁶ Department of Health, Social Services and Public Safety. A Fitter Future For All: Framework for addressing overweight and obesity in Northern Ireland 2012 – 2022. Belfast: DHSSPS, 2006. Available at www.dhsspsni.gov.uk/framework-preventing-addressing-overweight-obesity-ni-2012-2022.pdf. Accessed 11 November 2015.