



University of Chester

**This work has been submitted to ChesterRep – the University of Chester’s
online research repository**

<http://chesterrep.openrepository.com>

Author(s): Catherine Perry; Stephanie May

Title: Increasing awareness of healthy eating through the use of performing arts: an
evaluation of the StarBites project

Date: January 2006

Originally published in:

Example citation: Perry, C., & May, S. (2006). *Increasing awareness of healthy
eating through the use of performing arts: an evaluation of the StarBites project*.
Chester: University of Chester

Version of item: Published version

Available at: <http://hdl.handle.net/10034/7900>

Centre for Public Health Research

**Increasing awareness of healthy eating through the use of
performing arts
An evaluation of the StarBites project**

**Catherine Perry
Stephanie May**

January 2006

**Copyright © Centre for Public Health Research
University of Chester**

ISBN 1-902275-35-7

Acknowledgements

There are a number of people who have contributed to this project who we would like to thank:

- individuals from the seven schools who participated in the research, including the teaching staff who gave their time to be interviewed, and those who distributed and collected the parent questionnaires;
- the parents who kindly took the time to complete the questionnaires;
- all of the parents and audience members who completed a 'post-it' during the StarBites evening;
- Ruth Edson, (arts for health co-ordinator), Liz Blower (food for health co-ordinator), and Anna Nygaard (project manager), from Halton's Healthy Living Programme;
- the children who took part in StarBites;
- Tanya Samuels for assistance in report writing.

This work was commissioned and funded by Halton's Healthy Living Programme.

Table of Contents

		Page
Acknowledgements		i
Table of contents		ii
List of tables		iv
Executive summary		v
Chapter 1	Introduction	1
	1.1 Introduction	1
	1.2 StarBites	1
	1.3 Evaluation of StarBites	3
	1.4 Structure of the report	3
Chapter 2	Literature review	4
	2.1 Health and nutrition	4
	2.2 Children and diet	5
	2.3 Health promotion in schools	6
	2.4 Evaluation of healthy eating interventions in schools	7
	2.5 The performing arts in education	8
	2.6 Conclusion	9
Chapter 3	Study design and methods	11
	3.1 Introduction	11
	3.2 Data collection methods	11
	3.2.1 The 'post-it' approach	11
	3.2.2 Questionnaire with parents	12
	3.2.3 Semi-structured interviews with teachers	12
	3.3 Research ethics	13
Chapter 4	'Post-it' findings	14
	4.1 Introduction	14
	4.2 Characteristics of the 'post-it' respondents	14
	4.2.1 'Post-it' responses: parents	16
	4.2.2 'Post-it' responses: children	16
	4.2.3 'Post-it' responses: adults	17
	4.3 Conclusion	17
Chapter 5	Survey findings	18
	5.1 Introduction	18
	5.2 Characteristics of respondents who completed questionnaires	18
	5.3 Key messages	18
	5.4 Enjoyment of StarBites performance	19
	5.5 Differences in perceptions of food	19
	5.6 Family eating habits	19
	5.7 Delivering health messages through performing arts	20
	5.8 Further comments	20

	5.9	Conclusion	20
Chapter 6		Semi-structured interviews with teachers	22
	6.1	Introduction	22
	6.2	The introduction and development of StarBites	22
	6.3	Selection of children in StarBites	23
	6.4	Links with the curriculum	24
	6.5	Using drama to deliver health messages	25
	6.6	Children's' reactions to StarBites	26
	6.7	Teachers' views on StarBites	26
Chapter 7		Discussion	29
	7.1	Introduction	29
	7.2	Limitations of the study	29
	7.3	Quality of the experience	29
	7.4	Conveying key health messages	31
	7.5	Developing healthy eating habits	32
	7.6	Conclusions	33
References			34
Appendices			
Appendix 1		'Post-it' sheet	37
Appendix 2		StarBites questionnaire	38
Appendix 3		Information sheet for parents/carers	39
Appendix 4		Information sheet for teachers	40
Appendix 5		Interview schedule for teachers	41
Appendix 6		Comments from parent questionnaires	42

List of tables

Table		Page
4.2.1	Number of responses from identified groups	15

Executive summary

Introduction

StarBites was a joint initiative between the arts for health and food for health strands of Halton's Healthy Living Programme (HHLP). The aim of the project was to convey healthy eating messages using the performing arts: dance, drama, poetry and music performed by school children. The project culminated in an evening performance for parents, friends and teachers in March 2004.

The Centre for Public Health Research (CPHR), University of Chester, was commissioned to conduct an evaluation of StarBites. The evaluation examined parents' and teachers' perceptions of StarBites, and whether the project had effectively communicated information about healthy eating to children, parents, and audience members.

Methods

Information was collected from three different sources, which were:

- 105 'post-it's' completed by members of the StarBites audience;
- a questionnaire completed by 19 parents of children involved in StarBites, two weeks after the performance;
- five semi-structured interviews with teaching staff involved in developing StarBites performances.

Findings

There were a number of findings from this study.

- Teachers and parents thought that the children involved in StarBites had enjoyed participating in the project and had benefited from the experience.
- Parents and teachers perceived the performing arts to be an effective way to communicate information about healthy eating to children.
- Teachers thought that the performing arts may provide a more effective way to engage children than conventional teaching methods, saying that information communicated in this way was more likely to be retained by children.

-
- Teachers mentioned a number of additional unintended positive outcomes that have resulted from participation in StarBites, including increasing children's confidence, self-esteem and team-building skills.
 - Members of the audience enjoyed the performances and described them as entertaining.
 - Results from the 'post-it' exercise indicate that the performances successfully communicated three of the key messages about healthy food to audience members.
 - The most successfully communicated messages appear to concern the importance of eating a healthy diet, eating five portions of fruit and vegetables a day and drinking plenty of water.
 - Responses in the survey indicate that parents could recall key messages from the evening two weeks after the event.
 - Parents who took part in the survey said that StarBites had encouraged them to think differently about food.
 - Half of the respondents in the survey said that StarBites had influenced them to change their eating habits, although changes could not be observed.
 - Increasing the consumption of fruit and vegetables was the most frequently reported change in eating habits as a result of StarBites.
 - There were some concerns about practical aspects of StarBites such as the cost, travel arrangements to the event and sound equipment used on the night.
 - Teachers were concerned that only a small number of children were directly involved in StarBites, therefore the impact of the project was limited to the children and parents directly involved.

Conclusion

It would appear that the StarBites initiative was largely successful in meeting its aim and objectives in the short term, although any longer term impact is not possible to determine. The study showed that drama in education was perceived by parents and teachers as being an effective way to deliver messages about healthy eating. Three of the six messages about a healthy diet were successfully conveyed and parents demonstrated good recall of the key health messages two weeks after the StarBites event.

Teachers and parents said they had enjoyed taking part in StarBites and thought that the children who participated had also enjoyed the experience. Teachers were confident that information presented using drama was more likely to be internalised and recalled by children than information presented using conventional teaching methods. Some of the teachers who took part in interviews said they had recruited children who were unlikely to take part in other school activities, which suggests that drama in education can be used as a mechanism to facilitate inclusion in primary schools.

A small number of the schools which were invited to participate in StarBites accepted the invitation, with just seven of the 49 schools in Halton taking part. Furthermore, all of these were already involved in healthy schools initiatives. This raises questions about how to promote activities like StarBites in schools where little other healthy schools activities are being conducted, and what kind of incentives and levels of support may be needed by those without experience in similar initiatives. It is possible that teachers may require greater support to enable them to integrate StarBites into the curriculum in ways that do not generate large amounts of additional work.

Chapter 1

Introduction

1.1 Introduction

Healthy Living Centres (HLCs) were introduced to improve the health of the most deprived sections of the population and to reduce health inequalities. They aim to help people maximise their opportunities for health and wellbeing and were designed to complement the Government's health strategies for the United Kingdom (Department of Health, 1998; Meyrick & Sinkler, 1999). Halton's Healthy Living Programme (HHLP) was designed to provide positive experiences of healthy living to people who live and/or work in the Borough. The programme is funded until 2006 by the New Opportunities Fund (NOF), (which is now the Big Lottery Fund), and it is overseen by a multi-disciplinary management steering board with representatives from Halton Primary Care Trust (PCT) and Halton Borough Council.

Halton's Healthy Living Programme has five key strands: arts, complementary therapies, food, physical activities and an information strand. These have been supported by a core team comprising the HHLP manager and HHLP administrator. StarBites was a joint initiative between the arts and food strands of HHLP which involved local primary school children developing a piece of drama with the theme of 'healthy eating', which was performed in front of an audience of parents and adults.

1.2 StarBites

The main aim of StarBites was to raise awareness of healthy eating among children and their parents. The project used the performing arts as a vehicle for increasing awareness of healthy eating, and to motivate children to eat healthily and their parents to support them in this endeavour.

The objectives of StarBites were:

- to facilitate the production of a good quality experience of participating in a performing arts event with a healthy eating focus;
- to convey key healthy eating messages;
- to encourage and support parents to help their children develop and maintain healthy eating habits.

All 49 primary schools in Halton were invited to participate in StarBites. Schools were contacted by letter and provided with further information about StarBites by the co-ordinator for the arts strand of HHL P. Each school was also offered the opportunity to take part in a 'starter workshop' with a professional artist, for which a charge of £50 was made. The objective of the project was for each school to create a ten-minute piece of drama, music, dance or poetry with a healthy eating message. Seven schools accepted the invitation to take part, and school productions were presented in a performance to parents and friends held in March 2004 at Queens Hall in Widnes.

The overall message which StarBites aimed to promote was to eat healthily. During the performances, children were also encouraged to convey the following specific key healthy eating messages:

- eat breakfast;
- drink lots of water;
- eat a variety of foods;
- try new foods;
- eat five portions of fruit and vegetables a day.

In addition, some of the participating schools developed performances about other health themes such as the importance of taking regular exercise and oral hygiene.

Each of the seven schools involved in the evening's events produced a set piece which aimed to communicate a specific healthy eating message. These are listed below.

- Water Works: a dance with comments on the positive effects of drinking water, for example water makes us strong.
- Healthy Fruity Rap: a rap by seven boys and one girl about the benefits of eating a balanced diet.
- Talking Heads: children using papier mâché heads they had made to discuss healthy eating messages focusing on drinking water and eating five portions of fruit and vegetables a day.
- Emily's Tooth: a play about the importance of eating healthy food in order to have strong teeth and a rap on healthy eating with audience participation.
- The Way We Feel: a rap and chant by children about how good food makes us feel.

-
- A Lecture by Class 4: dialogue on the activities of the school throughout the year in relation to healthy activities such as a skipping, a gym display and poetry.
 - Good Food versus Bad Food: a rap with two groups of children representing good or bad food groups, completed with a short play about choosing healthy food and eating a variety of foods in moderation.

In total, there were 99 children who participated in the performance. Children ranged in age from six to eleven years and were selected from year 1 to year 6. An audience of approximately 350 people watched the event. During the interval, the audience and performers were encouraged to study the stands arranged around the auditorium, on which healthy eating messages were displayed along with information about other school, community and HHL P activities. A selection of food and drink, such as pieces of fresh fruit, pasta salad, carrot cake, flapjacks, bottled water, tea and coffee, were available for people to try. The evening's events were completed by a prize draw to win a smoothie maker and basket of fruit.

1.3 Evaluation of StarBites

The Centre for Public Health Research (CPHR) at the University of Chester, was commissioned to carry out a study of StarBites as part of the overall evaluation of HHL P. The project was evaluated against its own aim and objectives. Therefore, the overall aim of the study was to explore parents' and teachers' views of StarBites. The main objectives were to:

- evaluate whether StarBites was an effective vehicle for raising awareness of healthy eating among parents/carers;
- explore teachers' perceptions of using the performing arts to convey healthy eating messages to children in a school setting.

1.4 Structure of the report

Chapter 2 of this report provides a review of the literature on children and diet, the promotion of healthy eating in schools and using the performing arts to communicate information. Chapter 3 explains the study design and how the information was collected and analysed. The results from the different methods of data collection are presented in Chapters 4, 5 and 6 and Chapter 7 provides a discussion of the findings.

Chapter 2

Literature review

2.1 Health and nutrition

There is a considerable amount of evidence on the impact of diet on health. Increasing fruit and vegetable consumption has a positive impact on health in general (Key, Thorogood, & Appleby, 1996; Trichopoulou et al., 1995) and can significantly reduce the risk of many chronic diseases (World Health Organisation, 2003). It is estimated that eating at least five varied portions of fruit and vegetables a day lowers the risk of death from chronic diseases such as heart disease, stroke and cancer by up to 20% (Department of Health, 2000). Among young people, poor diet has been shown to contribute to the prevalence of dental caries, obesity and anaemia as well as the eventual occurrence of these chronic diseases (Department of Health, 1999).

However, many adults in Britain consume less than the recommended five portions of fruit and vegetables per day, as well as having high intakes of fat, salt and sugar (Food Standards Agency and Department of Health, 2002). The National Diet and Nutrition Survey of children aged between 4-18 years old revealed that the consumption of fruit and vegetables among this age group is also less than the recommended five portions per day, with the most commonly consumed foods being white bread, savoury snacks, chips, biscuits, potatoes and chocolate confectionary, with fizzy soft drinks being the most popular beverage (Ministry of Agriculture, Fishery and Foods and Department of Health, 2000). In addition, research indicates that children are becoming increasingly sedentary, and are consuming a diet which is less healthy than in the past (Office of National Statistics, 2000).

Dietary surveys have highlighted social and regional inequalities in relation to low income and poor diets (Ministry of Agriculture, Fishery and Foods and Department of Health, 2000; Food Standards Agency and Department of Health, 2002) and there are many inequalities in knowledge and behaviour concerning health and nutrition (Department of Health, 2005). Men tend to have poorer knowledge about nutrition than women (Parmenter, Waller & Wardle, 2000) and knowledge of nutrition has been found to decline with lower educational level and socio-economic status (Parmenter et al., 2000). The consumption of fruit and vegetables varies markedly between socio-economic groups, with a larger proportion of men and women in

managerial groups consuming the recommended five portions per day compared to people in routine and semi-routine occupations (Sproston & Primatesta, 2004).

It is evident, then, that in general in the United Kingdom, diet is a cause for concern. Furthermore, the national picture is mirrored within the borough of Halton. Within this region, which has some of the worst Standardised Mortality Ratios (SMRs) in the country for major causes of death such as cancers, coronary heart disease and strokes (Halton Partnership, 2003), a study carried out in 2001 revealed that 88% of the population ate less than the recommended five portions of fruit and vegetables a day (North Cheshire Health Authority, 2001). In addition, almost 50% of the adult population were overweight and 15% were measured as obese, although this latter figure is slightly lower than the national average, which is 17% for men and 20% for women. One of the recommendations of a recent study commissioned in response to local concerns about health was to improve diet in the Borough (Halton Partnership, 2003).

2.2 Children and diet

A child's diet has both immediate and long-term implications for health (Licence, 2004). Diet and nutrition influence a child's physical and mental growth and development in early life (Perez-Rodrigo & Aranceta, 2001). In addition, studies indicate that good nutrition contributes to improving the wellbeing of children and their potential learning ability, thus contributing to better school performance (Nicklas, Webber, Johnson, Srinivasan & Berenson, (1995) cited in Perez-Rodrigo & Aranceta, 2001).

Many of the foundations of a healthy diet are established in childhood (Licence, 2004) and food habits developed during infancy and childhood can influence preferences and practices in later life. Some evidence suggests fair to moderate tracking of food habits from childhood into adolescence (Kelder, Perry, Klepp & Lytle, 1994; Resnicow, Smith, Baranowski, Baranowski, Vaughan & Davies, 1998). The importance of diet on a child's physical and mental development, and later lifestyle preferences, highlights the importance of targeting health promotion activities designed to improve the diet of children. However, a child's eating habits are usually formed by a complex interaction of different factors and may not be easy to influence.

Young children do not choose what they eat; their parents decide (Perez-Rodrigo & Aranceta, 2001). Parents represent a potentially powerful intermediary who can

influence children's eating habits, and a number of strategies have been introduced to capitalise on this in programmes designed to have an effect on eating habits in children (Hart, Herriot, Bishop & Truby, 2003). One objective of including a family component in interventions is to stimulate awareness and gain parental support for encouraging changes to a child's diet and increasing the availability of healthy foods in the home (Perez-Rodrigo & Aranceta, 2001).

Evidence suggests that both parental and peer influences have a positive impact on the consumption of fruit and vegetables (Weber Cullen et al., 2001). However, the relationship between a child's diet and their parents' diet is not a simple one, and very little is known about the factors influencing mothers' food choices for themselves and how this relates to their children. A study conducted by St John Alderson and Ogden in 1999 found that mothers tend to feed their children in a less healthy way than they feed themselves. Nevertheless, during early childhood, the family is a key influence informing children's food preferences and eating habits. As they grow older, other individuals and social groups are likely to play an increasingly important role in children's food preferences, including school, teachers, peers, the media and social leaders (Perez-Rodrigo & Aranceta, 2001).

2.3 Health promotion in schools

Schools have been identified as providing an effective and efficient way to reach a large segment of the population, including young people, school staff, families and community members. The government document 'Our Healthier Nation' (Department of Health, 1998) states that schools can play a pivotal role in the delivery of health promoting principles (Scriven & Orme 2001), and health promotion initiatives in schools are now an established activity. Health promotion in schools is often linked to the National Healthy School Standard (NHSS), which seeks to develop health promotion within the framework of the National Curriculum (NC) as part of a whole school approach to healthy eating, healthy living and healthy environments (Department of Health, 1999). Schools can promote a healthy environment using both the formal and informal curriculum, and through empowering children to make healthy choices (Parker, 1997). Primary schools have been cited as particularly suitable for health promotion programmes because primary school age children are responsive to health messages, and behavioural change may be maintained into adolescence and adulthood (Dietz (1992) cited in Sahota, Rudolf, Dixey, Hill, Barth & Cade, 2004).

A number of programmes have been developed within the school environment specifically to promote healthy eating, including national programmes such as 'Grab 5' and 'Tasty Tuck', which both encourage children to eat more healthy foods and discourage the eating of sweets and biscuits (Edmunds & Jones, 2003). These programmes were integrated into the school environment through the NHSS as one of the key themes of work for each school year. Healthy eating is a major strand of the healthy schools programme and during 2004 more than 300 English primary, secondary and special schools took part in a variety of pilot projects including healthier breakfast clubs, cookery clubs, healthier lunchboxes, healthier tuckshops, healthier vending machines, food growing clubs, creating better dining room environments and improving water supplies (Weir, 2005). However, measuring the impact of school-based interventions designed to improve children's eating habits is difficult. In particular it is hard to obtain accurate information from children about what they eat; they usually require intensive training in order to produce accurate food records, and there are often low test-retest correlations (Weber Cullen et al., 2001).

2.4 Evaluation of healthy eating interventions in schools

Evaluations of school-based interventions have shown mixed results. Much of the published literature involves evaluations carried out in the United States and Canada (Perry, Zauner, Oakes, Taylor, & Bishop, 2002; Blom-Hoffman, Kelleher, Power, & Leff, 2003). Several different measures have been used to evaluate healthy eating interventions in schools including increased awareness about food, positive attitudes towards healthy foods and related knowledge and behaviour change.

Several evaluations have demonstrated positive results in terms of improving knowledge and awareness about nutrition, although improvements in knowledge do not necessarily translate to changes in behaviour. However, the pilot projects set up under the healthy schools programme mentioned above were all considered to have been successful in terms of increasing knowledge and awareness of healthy eating and in changing behaviour (Weir, 2005). In evaluations such as these where positive outcomes have been observed it is difficult to establish how many of the immediate improvements in diet are sustained and among which groups of children. Improvements appear to have been sustained in some studies, whereas others have found a sustained effect among some groups but not others (Nicklas, Johnson, Myers, Farris, & Cunningham, 1998).

Some studies are difficult to interpret. For example, one study showed that a school intervention was successful in increasing the consumption of fruit, but had no impact on vegetable consumption (Perry et al., 1998). Other interventions have shown improvements in particular age and gender groups, but demonstrated poorer results among low income and ethnic minority groups (Friel, Kelleher, Campbell, & Nolan, 1999; Nicklas et al., 1998). Finally, some evaluations demonstrated that children's nutrition habits changed only slightly if at all (Atkinson & Nitzke, 2001).

Health interventions designed to improve children's diets appear to be most effective when they adopt a whole school approach and there is enthusiasm and support from all involved (Weir, 2005). For example, multi-component school-based programmes, which include classroom curriculum, school food service and parental involvement have reported significant increases in observed lunch time intake of vegetables and fruit (Luepker, Perry, McKinlay, Nader, Parcel and Stone, 1996, cited in Perez-Rodrigo & Aranceta, 2001).

2.5 The performing arts in education

All school pupils are required to study aspects of the performing arts, and specifically drama, throughout their education as part of English and literacy. It is a key part of school provision for the arts (Arts Council, 2002). Drama is an art form which combines practical activities with intellectual discipline, and it has been identified as contributing to developing skills in: information processing; reasoning; enquiring; creative thinking; and evaluation (Arts Council, 2002). Drama in education has been used with primary and secondary school children in the UK and offers a way to engage a wide range of children in activities whilst overcoming barriers imposed by poor literacy or language skills.

Ball (1994) suggested that drama in education and health education share a common philosophical basis, which makes the use drama for health education purposes particularly appropriate (1994, cited in Douglas, Warwick & Whitty, 2000). This includes shared use and concern for the following:

- affective and cognitive involvement;
- active learning;
- an exploration of attitudes and values;
- role taking;
- emphasis on self-empowerment;

-
- consideration of what it is to be human;
 - a community dimension.

The use of drama to convey health messages in schools is an established forum (Sawney, Sykes, Keene, Swinden, & McCormick, 2003). Particularly, it offers a valuable approach for addressing sensitive issues within schools, especially for those children open to risk-taking behaviour or lifestyle choices (Macdonald & Nehammer, 2003). Much published literature has focused on the use of drama to promote sex and relationship messages (e.g. McEwan, Bishop, & Patton, 1991; Poulsen & Fouts, 2001) and drugs awareness (e.g. Starkey & Orme, 2001; Macdonald & Nehammer, 2003). All of these studies focused on educating children and young people through drama and their results, although not conclusive, have tended to report that drama has a positive impact in terms of delivering health messages. For example, Starkey and Orme (2001) demonstrated that primary school children involved in a drama in education programme about drugs showed an increase in knowledge of the names of specific drugs and increased awareness that alcohol and cigarettes were also drugs. The programme had also encouraged the children to think in less stereotypical terms about drugs and drug users (Starkey & Orme, 2001). In another study, Macdonald and Nehammer (2003) found that children who observed drama in education performances about drugs reported that they found the experience both entertaining and informative.

There is little published material on the impact of drama in education programmes among children actually involved in a performance, although the project studied by Starkey and Orme (2001), which was referred to previously, did involve some involvement in performances for participating children. In addition, the longer term impact of observing or taking part in drama in education programmes has not yet been evaluated. Similarly although a number of drama in education interventions have involved parents there is very little research that examines the impact of their involvement on parental attitudes to particular issues.

2.6 Conclusion

There is an increasing amount of evidence on the impact of diet on health, but many people in Britain still eat less than the recommended five portions of fruit and vegetables each day (Department of Health, 2000). There are also many inequalities in terms of knowledge of diet, nutrition and behaviour, and this is a particular concern in Halton, where the majority of residents eat less than the recommended five

portions (North Cheshire Health Authority, 2001). Many of the foundations for a healthy diet are established in childhood, and food habits formed in early childhood appear to influence eating habits in later life. It has been recognised that schools can play a pivotal role in the delivery of health promoting principles (Scriven & Orme, 2001). Health promotion initiatives in schools are now an established activity and a number of programmes have been developed within the school environment specifically to promote healthy eating.

Evaluations of healthy eating interventions in schools have shown mixed levels of success. Many interventions have succeeded in increasing children's knowledge of healthy eating, and some appear to have influenced behaviour, although this has proved more difficult. The use of drama to convey health messages in schools is now an established forum (Sawney et al., 2003) and evidence suggests that drama in education interventions can have a positive impact on raising knowledge and encouraging children to think differently about particular issues. However, there is relatively little information about the impact on children directly involved in drama productions and how this differs to children in the audience, or how sustained initial changes in knowledge, attitudes or behaviour are likely to be. This study explores teachers' and parents' impressions of using drama in education to communicate messages about healthy eating to children, and the potential impact of using this approach to convey information to participants and audience members.

Chapter 3

Study design and methods

3.1 Introduction

This was a small-scale study designed to explore the extent to which StarBites had achieved its aim and objectives. The study used qualitative and quantitative methods to collect information and the data collected from the different sources were triangulated in order to validate the findings (Keen & Packwood, 1995). Data were collected from a variety of different 'stakeholder' perspectives in order to develop an understanding of StarBites and how it was perceived by different groups of people who were involved in the initiative.

3.2 Data collection methods

The three methods of data collection were:

- a 'post-it' information gathering exercise with members of the StarBites audience;
- a short questionnaire, which was completed by parents who watched the performance two weeks after the event;
- semi-structured interviews with teachers involved in developing the StarBites performances.

3.2.1 The 'post-it' approach

The 'post-it' approach was designed to gather information about the immediate perceptions of the parents and other audience members watching the StarBites performances. A 'post it' (Appendix 1) was placed on each seat in the auditorium at the beginning of the evening and the compère explained to members of the audience that they would be asked to complete these at the end of the performance. Individuals were asked to write three key messages that they had taken from StarBites performances onto the 'post-it'. In order to encourage participation in this activity, audience members were asked to write their name on the reverse of their 'post-it' so that it could be entered into a prize draw, which was drawn at the end of the evening.

The data gathered from the 'post-its' were entered onto an Excel spreadsheet. The responses were used to determine the initial impact of the StarBites performances in terms of the delivery of healthy eating messages.

3.2.2 Questionnaire with parents

A short questionnaire was designed to gather information from parents who had watched StarBites, two weeks after the performance (Appendix 2). The questionnaire was developed from an existing instrument (Sawney et al., 2003) and it aimed to:

- assess the retention of the healthy eating messages identified in the 'post-its';
- explore with parents whether their eating patterns had changed in any way since the StarBites performances;
- assess parents' perceptions about the effectiveness of using drama as a medium to convey healthy eating messages.

The researcher collaborated with the schools involved in order to develop the most effective methods of distribution and collection of questionnaires. At all seven participating schools, questionnaires were sent home with children together with an information sheet for parents (Appendix 3) and completed questionnaires were returned to the school. Nineteen questionnaires were sent back to the CPHR by the schools for analysis. The names of parents who had participated in the survey were entered into a prize draw as an incentive to encourage parents to participate.

The questionnaires were analysed using the Statistical Package for Social Scientists (SPSS).

3.2.3 Semi-structured interviews with teachers

Semi-structured interviews were conducted with teachers from the participating schools. Following a telephone call from the researcher to the link teacher in each school, information about the study was sent to those who agreed to be interviewed (Appendix 4). Semi-structured interviews have a 'loose' structure consisting of open-ended questions that define the area to be explored, but allow the interviewer or interviewee to diverge in order to follow up particular areas in more detail (Britten, 1995). Thus, although the interview topics and questions that lead into exploring these areas may have been defined initially, the semi-structured format allows interviewees to express ideas that are important to them, clarify answers and enable complex issues to be probed (Bowling, 2002). The interview schedule can be found in Appendix 5. Questions were designed to explore: how teachers had integrated StarBites into the curriculum; perceptions of the effectiveness of StarBites; and any particular issues that were important to the interviewees.

All of the interviews were conducted in March and April 2004. With the permission of the interviewee, interviews were audiotaped. Audiotapes were transcribed and a thematic analysis was carried out.

3.3 Research ethics

Ethical approval for the study was gained from the CPHR Research Ethics Committee on 16th March 2004.

Chapter 4

‘Post-it’ findings

4.1 Introduction

This chapter contains the findings from the ‘post-it’ analysis. ‘Post-its’ were placed on the seats in the auditorium at the Queens Hall for the evening performance and people in the audience (adults and children) were asked to write the three key health messages they had taken from StarBites onto the ‘post-it’ at the end of the evening.

4.2 Characteristics of the ‘post-it’ respondents

In total 105 ‘post-its’ were completed, which represents approximately 70% of the audience. All members of the audience were asked to complete a ‘post-it’. Although the majority of these identified themselves as parents, teachers or children a number did not classify themselves into any of these three groups. Of the ‘post-its’ completed:

- 59 were completed by parents of children performing in StarBites;
- 14 were completed by children in the audience;
- 8 were completed by people who said they were not parents/carers;
- 24 were completed by audience members who did not specify a category.

Table 4.2.1 (overleaf) indicates the number of times each message was mentioned and details the responses in terms of the identified groups; children, parents, non-parent adults and others (not specified). Nearly all the audience members wrote three key messages.

Table 4.2.1 Number of responses from identified groups

Message	Children	Parents	Adult		Total	% of total responses
			Non-parent	Other		
Drink water	9	55	7	19	90	29
Eat healthily	8	30	7	10	55	18
5 a day	1	31	3	14	49	16
Brush teeth	8	27	5	7	47	15
Exercise	6	21	2	11	40	13
Eat a variety	2	11	1	2	16	5
Eat regularly		9			9	3
Eat breakfast		3			3	1
Other	1	2			3	1
Total	35	189	25	63	312	101*

*Percentage total does not add up to 100 because of rounding.

The overall message that StarBites was designed to convey, to eat healthily, and two of the specific key healthy eating messages, were among those most frequently mentioned on the 'post-its'. These were the importance of drinking water (90 responses, 29%), the importance of eating healthily (55 responses, 18%) and the importance of eating five fruit and vegetables each day (49 responses, 16%).

The other key messages such as eating a variety of different foods (16 responses, 5%) and the importance of eating breakfast (3 responses, 1%) appeared to be less successfully conveyed by the performances. However, they may have been recorded by respondents under the broad message of eating a healthy diet.

Although not all respondents identified all the key messages, most respondents were able to identify at least one of the key messages that StarBites was designed to convey. Of the 105 completed 'post-its', only four respondents (3%) did not identify any of the five key healthy eating messages or the overall eat healthily message. Two of these were from children and two were from non-specified respondents.

Although messages about oral hygiene or the importance of regular exercise were not among the stated health messages of the programme, they relate to messages communicated by performances, and these were mentioned on several 'post-its'.

4.2.1 'Post-it' responses: parents

This section highlights the responses of particular categories of the audience. There were 189 responses from parents concerning messages that they had taken from the StarBites evening. Nearly a third (61 responses, 32%) concerned healthy eating: either the importance of eating a healthy diet or the need to eat five portions of fruit and vegetables a day. All of the parents who took part in this exercise took the message about a 'healthy diet' away from the evening.

The importance of drinking water was also communicated to parents in the performance and 55 of all parents' responses (29%) cited 'drinking water' as a key health message of StarBites. Furthermore, drinking water was given as the first message by 30 parents, with only four parents not mentioning this as one of the three key messages of the evening.

The third most cited response concerned dental hygiene and the importance of cleaning teeth regularly (27 responses, 14%). Some responses given by parents appear to link messages concerning the importance of drinking water and cleaning teeth.

Three other key messages that StarBites was designed to deliver were not cited often by the parents. These were the importance of eating breakfast (cited by 3 respondents), 'eat a variety of foods' (cited by 11 parents) and 'try new foods' (not cited by any of the parents). However, it is possible that some of these messages were communicated indirectly when parents spoke about the importance of a balanced diet or eating five fruit and vegetables each day.

4.2.2 'Post-it' responses: children

Thirteen children took part in the 'post-it' exercise and 35 messages were recorded by children. Children who took part in the 'post-it' exercise appeared to have taken similar messages from the evening as parents. The most frequently mentioned messages were eating a healthy diet (11 responses, 31% of children's responses), and drinking plenty of water (9 responses, 28% of children's responses).

Twelve of the children were able to cite at least one key health message. As with parents, children were much less likely to mention messages concerning eating a varied diet, trying different foods, or eating breakfast and none of the 13 children who completed a 'post-it' mentioned any of these messages. However, six of the

responses cited 'exercise' which although not one of the intended StarBites messages was mentioned in some of the performances.

4.2.3 'Post-it' responses: adults

Eight adults (non-parents) completed the 'post-it' exercise. Of the 25 responses, 8 concern the importance of eating a healthy diet. This was closely followed by the importance of drinking water which was mentioned on seven occasions. All of the respondents in this group were able to identify some of the key messages that were intended to be conveyed by the performances, although none of the group specifically mentioned the key health messages concerning eating a varied diet, trying new foods or eating breakfast. However, all eight of the respondents were able to identify at least two of the key health messages.

4.3 Conclusion

The results from the 'post-it' exercise demonstrate that parents, children and adults in the audience had understood the key messages conveyed in the StarBites performances. Similar messages were taken from the event by parents, adults and children. Very few members of the audience and none of the parents or adults had not taken any of the key messages from the evening. The most frequently mentioned messages concern eating a healthy diet and the importance of drinking plenty of water. Messages concerning eating a variety of foods, trying new foods and eating breakfast did not appear to be as successfully communicated in the StarBites performances.

Chapter 5

Survey findings

5.1 Introduction

This chapter provides results from a questionnaire distributed to parents who watched the StarBites performance, two weeks after the event. The questionnaire used a mixture of closed (tick box) questions and open-ended questions, where respondents could write in their own comments. Some of these comments are presented here to illustrate points made, and all written comments made by respondents in the open-ended questions are reproduced verbatim in Appendix 6.

Out of the 99 questionnaires that were distributed to parents of the children who took part in StarBites, 19 were returned. No questionnaires were returned from parents of children in two schools which participated in StarBites. The overall response rate to the questionnaires was 19%, which represents a low response rate.

5.2 Characteristics of respondents who completed questionnaires

Of the 19 respondents 18 (95%) were female and 1 (5%) was male. The majority of respondents (95%) were aged between 30-45 years, and one respondent was aged between 45-60 years.

5.3 Key messages

Respondents were asked to identify three key messages that they took away from the StarBites evening. Fifty seven messages were provided by respondents. The most frequently mentioned message concerned the importance of a healthy diet, which accounted for 27 of the 57 responses (47%). Some of these described the importance of eating a balanced diet and avoiding sugary or fatty foods, whereas other mentioned the need to eat five portions of fruit and vegetables each day. Drinking plenty of water was the second most frequently mentioned message taken from the event (15 responses). Ten responses concerned the value of taking regular exercise.

The results from the survey are similar to the results obtained from the 'post-it' exercise conducted immediately after StarBites, with healthy diet and drinking plenty of water given as the key messages of the initiative. None of the respondents mentioned messages concerning eating breakfast or trying new foods. The results

from the survey indicate that some of the key messages communicated by StarBites were sustained for a period of at least two weeks after the event.

5.4 Enjoyment of StarBites performance

All of the respondents said they enjoyed the StarBites performances. The questionnaire asked for a more detailed response, specifically asking what respondents had enjoyed about the performance, and all those who completed a questionnaire made some comment. These comments focused on two general themes: the children's performances and the healthy eating messages conveyed in the productions.

A number of respondents spoke about the enthusiasm and effort that children contributed to the performances. One respondent said she had enjoyed *'performances, song, costumes and the variety of colours and the health issues they delivered'* (Respondent 15). Others focused primarily on the health messages delivered by the children involved in StarBites. One respondent commented that she had enjoyed *'the way the children put over the reasons for healthy eating'*. (Respondent 13).

The questionnaire asked if there was anything about the performance that respondents had not enjoyed. Only one comment was made, in respect of the sound, saying that it was difficult to hear some of the children and that *'they could have done with more microphones'*. (Respondent 19).

5.5 Differences in perceptions of food

Respondents were asked if the evening had any effect on how respondents think about food. Sixteen of the 19 respondents (84%) indicated that the StarBites evening had made them think differently about food. Those who reported thinking differently were asked exactly what they had thought about. Fifteen respondents identified a variety of issues including eating a healthy diet, eating more fruit and vegetables and reducing the consumption of foods high in sugar or fat. One respondent commented that the evening had made him/her *'try to swap sweets for fruit'*. (Respondent 14).

5.6 Family eating habits

Respondents were asked if the StarBites evening had any effect on the respondent's family eating habits. Eleven respondents (61%) indicated that there had been a

change in family eating habits, while 7 respondents (39%) said that no such change had occurred. When asked about changes in eating habits as a result of the StarBites evening, the responses indicated that increasing the amount of fruit and vegetables was the main effect. One respondent commented that s/he had *'tried to get my children to eat more vegetables and to be more aware of what they are eating'*. (Respondent 13). Some respondents said that as a result of StarBites his/her *'children are eating less junk food'*. (Respondent 3).

5.7 Delivering health messages through performing arts

Respondents were asked if they perceived an evening such as StarBites to be an effective way to deliver healthy eating messages. All of the respondents indicated that they thought this was an effective method. When respondents were asked to specify why this was, ten made comments indicating that children who are actively involved in learning were more likely to understand and retain information. One respondent said that it was good for children and *'more interesting than reading a book'*. (Respondent 6). One respondent said that it *'gets the message across but in a fun way for the children to understand'*. (Respondent 1). Another respondent said that *'children are getting more involved and they will learn that eating healthily is best.'* (Respondent 5).

5.8 Further comments

At the end of the questionnaire respondents were asked for further comments. Ten respondents commented, and the majority of these were positive and supportive of StarBites. Some respondents suggested that StarBites should become a regular event, and another said s/he had enjoyed seeing collaborative work between different schools. One respondent pointed out that having healthy food available around the auditorium was a *'good idea at break to have healthy food on offer to try to encourage people to try something new.'* (Respondent 9). The only negative comments, as mentioned previously, concerned the sound in the hall, with respondents stating that some children were difficult to hear.

5.9 Conclusion

The results from the survey conducted with parents show that those who took part in the survey enjoyed the StarBites performances. They had retained a number of the key messages that performances were designed to convey for up to two weeks after the event. A large proportion of those who took part in the survey reported that StarBites had made them think differently about food. Just over half of the

respondents said they had changed their eating habits as a result of the StarBites performance, and these changes appear to involve eating more fruit and vegetables and reducing the consumption of foods high in sugar or fat.

Chapter 6

Semi-structured interviews with teachers

6.1 Introduction

This chapter contains the findings from the analysis of the qualitative material generated by semi-structured interviews. Five school staff were interviewed from four schools: one head teacher; one year 5 teacher; one year 6 teacher; and two teaching assistants. Staff at three of the participating schools declined to take part in an interview. Although only a small number of interviews were conducted, they highlighted a number of issues regarding involvement in an initiative such as StarBites.

Three of the interviews were conducted face-to-face, one of which was conducted with two interviewees simultaneously, and one interview was conducted on the telephone. Face-to-face interviews were audiotaped and detailed notes were taken during the telephone interview. In order to maintain the anonymity of the interviewees, where quotations are used to illustrate points made they are labelled with an interviewee number.

6.2 The introduction and development of StarBites

All of the schools in the study were informed about the StarBites scheme by a letter from HHL P outlining the programme and inviting them to take part. The schools were also offered the opportunity to participate, for a small charge, in a workshop led by a professional artist in order to assist them in developing their dramatic piece. Of the four schools represented in the interviews, three accepted the opportunity to work with this artist.

The workshops were conducted with the groups of children who went on to participate in the StarBites evening in two schools. In these schools the workshops were used as a starting point from which they could develop their ideas into healthy eating themes and a performance. In one school, year 3 and 4 pupils participated in the workshop, but the school decided to develop the ideas generated by younger children into a performance using older children.

The schools who accepted the opportunity to work with a professional artist appeared to have enjoyed the experience. One interviewee stated that the artist had managed

to 'engage' the children, who were perceived to have benefited from the experience.

This interviewee stated:

'She was a very, very good poet. She encouraged vocabulary and was enthusiastic, the practices in the groups worked well with the children.' (Interviewee 1).

A teacher from the school that did not use the workshop explained that she had not felt it necessary because she was confident in using the resources from her own school networks to develop a performance. She stated:

'I did it all myself, that's all the information ... I'm sure if I needed it I would have phoned up and said I'm stuck please come and help me, but I didn't need it and to be honest I was quite confident just to get on with it really.' (Interviewee 2).

All the schools that took part in StarBites were actively involved in other healthy schools initiatives and some described the initiative as an extension of the whole school strategy for health, saying that it was consistent with other initiatives designed to encourage healthy eating and lifestyles. Two of the participating schools had introduced 'Tasty Tuck' awards, three provide a salad bar in school, and all four schools involved in the interviews had introduced healthy lunch initiatives. The head teacher of one school commented that she viewed StarBites as one aspect of a process of behaviour change. She stated:

'I think if we keep on doing things like this and chipping away at it, hopefully it will become part of the way they live, we can only try can't we? And try to get these messages across, which is why I said yes when we were offered this opportunity ... But it's an ongoing project, it is not as if it's a one-off and to be put to one side ... it will be something, part of a whole package, trying too get them to have healthier lives.' (Interviewee 3).

6.3 Selection of children in StarBites

Three of the schools involved in this study used StarBites to target particular groups of children. One interviewee explained that they had tried to engage children who would not normally be involved in school performances, and whilst voluntary participation was sought, particular children were encouraged to take part. This interviewee stated;

'The children involved, they were part of the arts club and it was voluntary involvement by children, initially, but we approached some children and after talking with their teachers offered places to children who would not normally be involved so it was a mixed ability group.' (Interviewee 1).

Another interviewee targeted children with learning difficulties to take part in StarBites, saying that children who have lower levels of academic achievement were given a chance to succeed in something practical. She explained that:

'I also chose children who some have specific learning difficulties and it was a chance for them to achieve in a non-academic way.' (Interviewee 2).

In the third school teachers selected activities for the StarBites performance that would appeal to particular groups of children. They selected a 'street dance' activity because they thought that this would encourage boys to take part. The teacher explained that the project was a collaboration developed with support from parents and people in the local high school. The teacher explained that:

'I was specifically targeting boys and dance ... one of our aims in the school action plan is to increase drama in school ... I found that one way to get boys interested in dance, which is always a challenge, was to do something called 'street dance' which was done with the high school ... and the boys absolutely loved it.' (Interviewee 2).

6.4 Links with the curriculum

All of the schools involved in the interviews were part of the National Healthy School Standard and reported that they had adopted a whole school approach to promote healthy eating. Interviewees explained that StarBites was consistent with other initiatives designed to encourage a healthy school environment.

School staff had integrated StarBites into the timetabled activities in different ways. One school integrated it into their day-to-day work by developing the ideas and practising the performance as part of the literacy timetable. Two schools used a combination of out-of-school time and timetabled activities to develop the ideas and practice the routines, incorporating practices into physical education, dance and drama lessons. One school used an after-school arts club to develop and practise their routine.

One interviewee reported that the information and knowledge gained from StarBites generated cross-curricular links between a number of different aspects of the curriculum. One example used to illustrate this point was a teacher stating that as a result of StarBites children had retained information about healthy eating, which had helped them answer questions on a science paper. The teacher stated;

'They have picked up on the healthy eating side. Year 6 have recently done a science paper and they all said that they could answer questions because they did the rap in their head, because there were

questions about carbohydrates and so on, so they have picked some things up. But if they didn't have the performance side it wouldn't have made such an impact, because they really enjoyed the performance.' (Interviewee 5).

In one school StarBites was integrated into the curriculum by linking the development of poetry to the literacy curriculum. The teacher stated;

'StarBites fitted in to the literacy set ... at the time we were doing poetry, so it worked quite well, dance and drama are also part of literacy ... I have done performance poetry before with them, but it tended to be on poems already written ... but because of this ... I've got the ideas, and I've got more confidence to say, right this is our theme lets do a poem, lets think of a way to perform it.' (Interviewee 5).

6.5 Using drama to deliver health messages

The school staff interviewed all agreed that the children who participated in StarBites appeared to have enjoyed the entire experience, from developing the material and practising the routines to performing on the evening. This is illustrated by the following comment:

'The children absolutely loved it; I would definitely do it again, because the children have just really enjoyed it.' (Interviewee 2).

All the interviewees considered the performing arts to be an effective way to convey health messages, saying that it had been effective in engaging children, particularly those who may not respond well to conventional teaching methods. Some teachers thought that children had retained more information than if it had been communicated by conventional methods. One head teacher stated:

'That's the biggest thing for our children, their self-esteem just rises visibly when they do something like that. But you are addressing children's learning styles. One of our agendas in school is to look at how children learn and just talking to them doesn't work ... the children just switch off, but if the children see something, it's visual and they take part in it, it's moving, it is good.' (Interviewee 3).

One interviewee said that it was only with hindsight that she realised just how effectively the messages had been conveyed using the performing arts:

'It was only afterwards that the healthy eating message has come across to them, because they have written a poem and rehearsed it, like I said with the science paper, (the children said) the rap helped with this question or I was watching television last night and they were talking about protein being good for growth. It is only since then [the performance] that they have linked the two together.' (Interviewee 5).

Most interviewees thought that StarBites messages were limited to those who participated in the performances. One interviewee explained that she would have

liked children who were not directly involved in StarBites to listen to the information about healthy eating. She said that:

'We didn't really focus on the message that much because it was just more the practicalities of producing the dance ... I spoke to them about it and what the task was, focusing on healthy eating, but it would have been nice from my point of view if the whole school was aware of it ... So it was a whole school focus because the intention is to spread the message throughout Halton whereas really it was just my class and their mums and dads that were part of it.' (Interviewee 2).

6.6 Children's reactions to StarBites

Interviewees thought that the children who participated in the StarBites evening had enjoyed the experience and benefited from the event. They spoke about StarBites contributing to building children's self-esteem and team building skills. One interviewee stated:

'The children will take a lot from it. It is an excellent platform for the children to share ideas and to work as a team. It encouraged the group, apart from the healthy eating message, the children pulled together.' (Interviewee 1).

Interviewees said that children had enjoyed participating in StarBites and appeared to have enjoyed watching the other performances, saying this had been a source of new information or had reinforced messages developed in their own performances. A head teacher stated:

'Watching other children perform, being part of the audience they were very enthusiastic as the audience, while they were watching the first half, they really got involved ... seeing the other schools and after [StarBites] they were saying, did you see that and that bit was good. They were already aware, it's not new information, it reinforces information they've already had.' (Interviewee 3).

6.7 Teachers' views on StarBites

The teaching staff interviewed described the evening as being well-organised and enjoyable for teachers. Some commented about enjoying the displays about healthy eating and the healthy foods that were available. Others commented on the diversity of the performances and the range and variety of ideas that emerged.

Teaching staff who were interviewed appeared to have enjoyed being a part of StarBites. Comments made during the interviews tended to focus on the benefit for the children involved and few of the teachers discussed the impact of StarBites in terms of their own staff development. One teacher explained that confidence in her

ability to develop and teach performance poetry had increased as a result of participation in the project.

All the teaching staff described StarBites as creating a platform for further work around healthy eating and said they would consider using the performing arts as a way to deliver health messages in the school. Another teacher explained how she would use the experience of StarBites to develop work for future science and literacy work, she stated:

'We do the topic [healthy eating] in science, so next term I will link that into StarBites so it will provide other areas that we can link with the curriculum ... the healthy eating scheme, healthy eating topics and some of the drama skills we've used we will filter that into literacy.' (Interviewee 2).

The interviewees said they would consider being involved in StarBites in the future.

Three interviewees spoke about the extra work involved in terms of the preparation time needed to develop productions. However, they thought the project was worthwhile and that it was something they would consider participating in again. Some explained that because this was the first time they had been involved there was an element of uncertainty and apprehension involved. One said she did not know what to expect or how well the children would perform. One interviewee stated:

'We had excellent support on the night but from the experience, if we had more knowledge we would look at it in a different way, now the school knows about it [StarBites] but the children will take a lot from it.' (Interviewee 1).

The majority of comments about the evening were positive. However, some interviewees expressed concerns about practical aspects of the evening. One teacher commented that some of the performances were not loud enough to hear the messages. She stated:

'I think ... they picked up on those two performances ... I think that's because they were a louder performance, I think its volume because one of the groups it was difficult to hear and if you can't hear it you don't know what the message is.' (Interviewee 5).

The organisation of the performances was mentioned as a concern by two interviewees, in that not all of the performers were able to see all of the other performances.

The travel arrangements had been a concern for some teachers. One school had difficulty meeting the travel expenses and had obtained a proportion of these from HHLF. One teacher explained that the cost of the travel had limited the number of children that could be involved, stating that:

'We went for a small group for the logistics of getting them to Queens Hall ... we had to pay for the cost ourselves ... We had done an event the week before with 25 children. We decided to keep it small.'
(Interviewee 3).

Chapter 7

Discussion

7.1 Introduction

This chapter draws together the findings from the different components of this study in order to evaluate the extent to which the StarBites project achieved its aim and objectives.

7.2 Limitations of the study

This was a very small-scale study and was limited to obtaining the views of some parents, teachers and audience members. Practical obstacles prevented the research team from speaking directly to the children involved to include their opinions of StarBites. Instead, teachers and parents were considered as key informants who could offer some information on children's reactions to the initiative.

The 'post-it' exercise provided some information about whether StarBites was able to communicate key health messages to members of the audience. However, there was a disappointingly low response rate to the questionnaire asking for parents' views on StarBites. The research team did not have the resources to follow up those who did not respond, therefore it is possible that a response bias may be operating and only those with strong opinions, or with a particular interest in providing a healthy diet, may have taken part in the survey. In addition, there was no measure of parents' baseline knowledge or attitudes prior to StarBites, making it difficult to quantify the impact of StarBites on parents. It was also unclear from the results to what extent changes reported by parents were the result of the performance, or as a result of information provided incrementally from their children in the course of their involvement with StarBites. Despite these limitations, the data gathered in this study provide some useful information to enable an assessment of whether StarBites had achieved its aim and objectives, and provide details about some of the issues that emerged in the process of conducting a drama in education initiative on healthy eating. The study also provides some useful feedback for HHLP that can inform similar initiatives in the future.

7.3 Quality of the experience

Parents clearly enjoyed the StarBites performance, and considered the performance to be of a high standard. The teachers who were interviewed appeared to have

enjoyed the experience also, although some commented on the extra work involved. Both parents and teachers perceived that the children involved in StarBites enjoyed and gained from their participation. These findings suggest that the quality of the experience was good.

Only seven of the 49 schools in Halton invited to take part in StarBites accepted the invitation, and these were already involved in other healthy schools initiatives. Some described the StarBites initiative as an extension of the whole school strategy for health, saying that it was consistent with other initiatives designed to encourage healthy eating and lifestyles. Two of the participating schools had introduced 'Tasty Tuck' awards, three provided a salad bar in school, and four had introduced healthy lunch initiatives. Comments made by some of the teachers suggested that programmes such as StarBites have the potential to create a ripple effect, helping to develop momentum for healthy eating initiatives and contributing to maximizing the impact of several healthy eating initiatives available in schools. Thus, it may be concluded that in some senses StarBites was 'preaching to the converted', and the question of how to engage schools not so actively involved with healthy schools initiatives is raised. It is possible that StarBites may not be attractive or suitable for schools without experience of healthy schools initiatives, and HHLP may wish to consider whether more support or a less ambitious programme is required to initiate work in schools without experience of similar initiatives.

Some of the teachers said that it had been relatively easy to integrate StarBites into different parts of the school curriculum. However, others appeared to have introduced StarBites as an extra-curricular activity, additional to their core responsibilities, which may explain why some perceived StarBites to have added significantly to their workloads. Initiatives like StarBites may wish to consider providing schools with more information and advice about how to integrate the work into their curriculum, and it is possible that this may encourage more schools to participate in similar initiatives in the future.

Teachers highlighted some of the practical difficulties that arose at the StarBites performance, including how to ensure that children could observe the performances of other schools whilst waiting to go on to the stage and problems with the sound equipment making it difficult to hear quieter children. In addition, some of the teachers thought that the transport costs associated with StarBites should be given consideration, saying that financial support was needed to cover the travel costs and

to enable them to include more children. Including several different schools in the initiative therefore appeared to make it more difficult to organise, although one parent and a teacher specifically mentioned that they considered multi-school initiatives to be good for children. The practical difficulties highlighted by the StarBites initiative should therefore be noted and taken into consideration during the planning stages of any similar initiatives in the future.

7.4 Conveying key health messages

StarBites appears to have been an effective way to communicate information to the audience. Almost all the respondents who took part in the 'post-it' exercise (parents, adults and children) had taken at least one key message from the evening, and most of the parents had taken three key messages from the event. The messages that were most frequently communicated were about eating healthily and drinking plenty of water. Parents who took part in the survey two weeks after the performance appeared to show good recall of the main messages and accurately retained information conveyed by the performances.

Although children's views of using the performing arts to communicate health messages were not captured in this study, teaching staff and parents perceived the activities used in StarBites to be an effective way to convey health messages to children. Some of the teachers had used a creative approach to recruiting children to StarBites, deliberately targeting those unlikely to participate in other school activities, which suggests that activities such as StarBites may provide an innovative way to address issues of inclusion in education. This is consistent with arguments presented by supporters of drama in education programmes who argue that drama can overcome barriers created by poor literacy or language skills (Macdonald & Nehammer, 2003).

Teaching staff and parents thought that using drama to convey health messages was more effective than conventional teaching methods. Many teachers and parents thought that children engage with information more effectively if it is communicated in entertaining ways. Some teachers thought that retention of information was higher when children enjoy the delivery of the messages. Comments such as these suggest that more work is needed to compare the impact of communicating information using drama in education with information presented using conventional teaching methods.

Teachers pointed out that there were a number of additional unintended benefits gained from communicating information in this way. Some said that the development of the material, discussion, rehearsals and reflection upon the performances developed children's confidence, self-esteem and team-building skills and therefore contributed in the widest sense to children's health and wellbeing. Some teachers seemed to regard this as one of the most rewarding aspects of StarBites, and this may be something that HHLP wish to exploit when they promote StarBites or similar initiatives to schools in the future. Some teachers pointed out that the impact of StarBites was limited to those children directly involved, and their parents. It is possible that StarBites could consider changes to the programme that would widen participation either by extending the number of children taking part or by including different levels of engagement for children, where some are involved in the materials development and some in the production, whereas other children may be involved through audience participation during the performance.

Few teachers appeared to consider the impact of participation in StarBites in terms of their own personal or career development, and this may be something that could be promoted in future to encourage more teachers to take part. If more than one teacher from each school became involved it would help to share the workload in the school.

7.5 Developing healthy eating habits

StarBites appeared to be effective in communicating healthy eating messages to parents and children. Results from the survey carried out with parents two weeks after the event suggest that the project was thought provoking and self reports from the parents indicate that StarBites had encouraged some to reflect on the messages and reconsider the food they offer their children.

Sixteen of the 19 parents who completed the questionnaire said that they thought differently about food as a result of StarBites. Most of these said they were considering eating more fruit and vegetables, or reducing the amount of food that is high in sugar or fat. Eleven of the 19 respondents said they had introduced some changes to eating habits as a result of StarBites and many of these changes appear to concern trying to encourage their children to eat a healthier diet.

The study was unable to explore whether changes in parents' perceptions of food and attempts to provide children with healthier food had any impact on children's eating habits. It was also not possible to explore whether changes that may occur in

eating habits are confined to eating patterns in the home, or whether it is possible to influence eating habits in other settings such as when children are in school or social situations, or how sustained any changes may be. It may be useful for schools to attempt to link children and parents who have expressed an interest in healthy eating, as a result of StarBites, into other healthy eating initiatives to maintain any positive behaviour changes that have occurred.

7.6 Conclusions

It would appear that the StarBites initiative was largely successful in meeting its aim and objectives in the short term, although any longer term impact is not possible to determine. The study showed that drama in education was perceived by parents and teachers as being an effective way to deliver messages about healthy eating. Three of the six messages about a healthy diet were successfully conveyed and parents demonstrated good recall of the key health messages two weeks after the StarBites event.

Teachers and parents said they had enjoyed taking part in StarBites and thought that the children who participated had also enjoyed the experience. Teachers were confident that information presented using drama was more likely to be internalised and recalled by children than information presented using conventional teaching methods. Some of the teachers who took part in interviews said they had recruited children who were unlikely to take part in other school activities, which suggests that drama in education can be used as a mechanism to facilitate inclusion in primary schools.

A small number of the schools which were invited to participate in StarBites accepted the invitation, with just seven of the 49 schools in Halton taking part. Furthermore, all of these were already involved in healthy schools initiatives. This raises questions about how to promote activities like StarBites in schools where little other healthy schools activities are being conducted, and what kind of incentives and levels of support may be needed by those without experience in similar initiatives. It is possible that teachers may require greater support to enable them to integrate StarBites into the curriculum in ways that do not generate large amounts of additional work.

References

- Arts Council, (2002). *Drama in schools*. (2nd ed.). Retrieved March 18, 2004, from <http://www.artscouncil.org.uk>
- Atkinson, R., & Nitzke, S. (2001). *School-based programmes on obesity*. [Electronic version]. *British Medical Journal*, 323, 1018-1019.
- Blom-Hoffman, J., Kelleher, C., Power, T., & Leff, S. (2003). Promoting healthy food consumption among young children: evaluation of a multi-component nutrition education programme. *Journal of School Psychology*, 42, 45-60.
- Bowling, A. (2002). *Research methods in health. Investigating health and health services*. (2nd ed). Buckingham: Open University Press.
- Britten, N. (1995). Qualitative interviews in medical research. *British Medical Journal*, 311, 251-253.
- Department of Health. (1998). *Our healthier nation: a contract for health*. London: The Stationery Office.
- Department of Health. (1999). *National Healthy School Standard. Getting started: a guide for schools*. London: The Stationery Office.
- Department of Health. (2000). *The NHS Plan*. London: The Stationery Office.
- Department of Health. (2005). *Choosing a better diet: a food and health action plan*. London: The Stationery Office.
- Douglas, N., Warwick, I., & Whitty, G. (2000). Vital youth: evaluating a theatre in health education project. *Health Education*, 100, 207-215.
- Edmunds, L., & Jones, C. (2003). *Summary of the Grab 5! Evaluation report*. Retrieved April 18, 2004, from <http://www.grab5.com>
- Food Standards Agency and Department of Health. (2002). *The National Diet and Nutrition Survey: adults aged 19 to 64 years*, Volume 1. London: The Stationery Office.
- Friel, S., Kelleher, C., Campbell, P., & Nolan, G. (1999). Evaluation of the nutrition education at primary school (NEAPS) programme. *Public Health Nutrition*, 2, 549-555.
- Halton Partnership. (2003). *Understanding factors affecting health in Halton*. Lancaster: Department of Geography and Institute of Health Research, Lancaster University.
- Hart, K., Herriot, J., Bishop, A., & Truby, H. (2003). Promoting healthy diet and exercise patterns amongst primary school children: a qualitative investigation of parental perspectives. *Journal of Human Nutrition Dietetics*, 16, 89-96.

-
- Keen, J., & Packwood, T. (1995). Case study evaluation. [Electronic version] *British Medical Journal*, 311, 444-446.
- Kelder, K., Perry, C., Klepp, K., & Lytle, L. (1994). Longitudinal tracking of adolescent smoking, physical activity and food choice behaviours. *American Journal of Public Health*, 84, 1121-1126.
- Key, T., Thorogood, M., & Appleby, P. (1996). Dietary habits and mortality in 11,000 vegetarians and health conscious people: results of a 17 year follow up. *British Medical Journal*, 313, 775-779.
- Licence, K. (2004). Promoting and protecting the health of children and young people. *Child Care, Health and Development*, 30, 623-635.
- Macdonald, G., & Nehammer, S. (2003). An evaluation of a drug education play for schools in South Wales. *Health Education*, 103, 83-87.
- McEwan, R., Bishop, R., & Patton, W. (1991). Drama on HIV and Aids: an evaluation of a theatre in education programme. *Health Education Journal*, 50, 155-160.
- Meyrick, J., & Sinkler, P. (1999). *An evaluation resource for Healthy Living Centres*. London: Health Education Authority.
- Ministry of Agriculture, Fishery and Foods and Department of Health. (2000). *The national diet and nutrition survey of 4-18 year olds*. London: The Stationery Office.
- Nicklas, T., Johnson, C., Myers, L., Farris, R., & Cunningham, A. (1998). Outcomes of a high school program to increase fruit and vegetable consumption: Gimme 5 - a fresh nutrition concept for students. *Journal of School health*, 68, 248-253.
- North Cheshire Health Authority. (2001). *Health, lifestyle and community survey*. North Cheshire Health Authority.
- Office of National Statistics (ONS). (2000). *The national diet and nutrition survey: young people aged 4 to 18 years*. London: The Stationery Office.
- Parker, L. (1997). Using drama as a nutrition tool in schools. *Nutrition and Food Science*, 1, 23-25.
- Parmenter, K., Waller, J., & Wardle, J. (2000). Demographic variation in nutrition knowledge in England. *Health Education Research*, 15, 163-174.
- Perez-Rodrigo, C., & Aranceta, J. (2001). School-based nutrition education: lessons learned and new perspectives. *Public Health Nutrition*, 4, 131-139.
- Perry, C., Bishop, D., Taylor, G., Murray, D., Mays, R., Dudovitz, B., Smyth, M., & Story, M. (1998). Changing fruit and vegetable consumption among children: the 5 a day power plus programme in St Paul, Minnesota. *American Journal of Public Health*, 88, 603-609.

-
- Perry, C., Zauner, M., Oakes, J., Taylor, G., & Bishop, D. (2002). Evaluation of a theatre production about eating behaviour of children. *Journal of School Health, 72*, 256-261.
- Poulsen, J., & Fouts, G. (2001). Impact of drama based teaching in academic performance of student's with/without learning disabilities. *International Journal of Practical Approaches to Disability, 24*, 44-49.
- Resnicow, R., Smith, M., Baranowski, T., Baranowski, J., Vaughan, R., & Davies, M. (1998). 2 year tracking of children's fruit and vegetable intake. *Journal of American Dietary Association, 98*, 785-789.
- Sahota, P., Rudolf, M., Dixey, R., Hill, A., Barth, J., & Cade, J. (2004). *Randomised controlled trial of primary school-based intervention to reduce risk factors for obesity*. [Electronic version]. *British Medical Journal, 323*, 1-5.
- Sawney, F., Sykes, S., Keene, M., Swinden, L., & McCormick, G. (2003). 'It opened my eyes'. *Using theatre in education to deliver sex and relationship education. A good practice guide*. Theatre in Education Retrieved March 18, 2004 from http://www.hda-online.org.uk/documents/theatre_in_education.
- Scriven, A. & Orme, J. (Eds.). (2001). *Health Promotion professional perspectives*. (2nd ed.). Buckingham: Palgrave in association with Open University Press.
- Sproston, K., & Primatesta, P. (2004). *Health survey in England 2003*. London: The Stationery Office.
- Starkey, F., & Orme, J. (2001). Evaluation of a primary school drug drama project: methodological issues and key findings. *Health Education Research, 16*, 609-622.
- St John Alderson, T., & Ogden, J. (1999). What do mothers feed their children and why? *Health Education Research, 14*, 717-727.
- Trichopoulou, A., Kouris-Blazos, A., Wahlqvist, M., Gnardellis, C., Lagiou, P., Polychronopoulos, E., Vassilakou, T., Lipworth, L., & Trichopoulos, D. (1995). Diet and overall survival in elderly people. *British Medical Journal, 311*, 1457-1460.
- Weber Cullen, K., Baranowski, T., Rittenberry, L., Cosart, C., Herbert, L., & de Moor, C. (2001). Child-reported family and peer influences on fruit, juice and vegetable consumption: reliability and validity measures. *Health Education Research, 16*, 187-200.
- Weir, C. (2005). Tucking in. *Public Health News*. 18th April 2005.
- World Health Organisation. (2003). *Diet, Nutrition and the Prevention of Chronic Diseases*. World Health Organisation. Geneva: Switzerland.

Appendix 1
'Post-it' sheet

'Post-it' sheet

What are the key health messages that you will take away from this evening?

1.

2.

3.

Are you a parent/carer yes[] no[]

If you are under 16 years, please tell us your age

If you are under 16 years, please tell us your age

Appendix 2

StarBites questionnaire

StarBites parent questionnaire

1. Name of child/children's school

Please tick the appropriate box

2. Your age group: under 30 [] 30-45 [] 45-60 [] 60+ []

3. Your sex: male [] female []

4. Did you enjoy the performance: yes [] no []

If yes, what did you enjoy about it?

If no, why do you think this was?

5. What are the key health messages that you took away from the evening?

1. _____

2. _____

3. _____

6. Has the evening made you think differently about anything to do with food?

Yes [] no []

If yes, what?

7. Has the evening had any affect on your family's eating habits?

Yes [] no []

If yes, how?

8. Is an evening like this a good way of getting healthy eating messages across?

Yes [] no []

Why/why not?

9. Any other suggestions or comments about the evening?

Sawney, F., Sykes, S., Keene, M., Swinden, L., & McCormick, G. (2003). *'It opened my eyes'*. *Using theatre in education to develop sex and relationship education. A good practice guide*. Theatre in Education Retrieved March 18, 2004 from http://www.hda-online.org.uk/documents/theatre_in_education.

Appendix 3
Information sheet for parents/carers

Information sheet for parents/carers

Increasing awareness of healthy eating through the use of performing arts: an evaluation of the StarBites project.

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything not clear or if you would like more information (contact details at the end of this information sheet).

Thank you for reading this.

What is the purpose of the study?

The purpose of this study is to evaluate the StarBites project, which is a drama based initiative aimed at supporting and encouraging healthy eating. The StarBites project is a joint initiative between the arts for health and the food for health aspects of Halton's Healthy Living Project (HLP).

The research project sets out to explore your views of the StarBites project and whether this is a good way to put across healthy eating messages.

Why have I been chosen?

You have been chosen because you are a parent/carer of a child or children and have watched the StarBites performance. You may also have participated in the 'post-it' activity as part of the StarBites performance.

Do I have to take part?

It is up to you to decide whether or not to take part. If you decide to take part you are still free to withdraw at any time and without giving a reason.

What will happen if I take part?

To take part in this study, please complete the enclosed questionnaire. It is short and requires you to tick boxes or give short written answers. When you have finished please seal the questionnaire in the envelope provided and send it to school with your child. We do not need your name on the questionnaire.

What are the possible disadvantages and risks of taking part?

There are no disadvantages or risks foreseen in taking part in the study.

What are the benefits of taking part?

You may enjoy the opportunity to reflect on your involvement in the StarBites performance and the possible benefits for the children involved.

Will my taking part in this study be kept confidential?

Taking part in the study is anonymous and we do not need your name or any identifying details on the questionnaire. Nobody need know that you have taken part.

What will happen to the results of the research study?

The results of the study will be used to inform the development of the StarBites project within Halton's HLP. A written report of the study will be produced but, as already explained, nobody who takes part in the study will be identifiable.

Who is organising and funding the research?

Halton's Healthy Living Project is funding the research. Researchers from the Centre for Public Health Research, University College Chester, are carrying out the study.

Who may I contact for further information?

If you would like more information about the study before you decide whether or not you would be willing to take part, please contact Stephanie May on 01244 375444 extn.2024, or write to her at the Centre for Public Health Research, University College Chester, Parkgate Road, Chester, CH1 4BJ or email s.may@chester.ac.uk. Or please contact Catherine Perry on 01244 220364, or write to her at the Centre for Public Health Research, University College Chester, Parkgate Road, Chester, CH1 4BJ or email c.perry@chester.ac.uk.

Appendix 4
Information sheet for teachers

Information sheet for teachers

Increasing awareness of healthy eating through the use of performing arts: an evaluation of the StarBites project

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything not clear or if you would like more information (contact details at the end of this information sheet).

Thank you for reading this.

What is the purpose of the study?

The purpose of this study is to evaluate the StarBites project, which is a drama based initiative aimed at supporting and encouraging healthy eating. The StarBites project is a joint initiative between the arts for health and the food for health aspects of Halton's Healthy Living Project (HLP).

The research project sets out to explore your views on the following research questions:

- To what extent and in what ways has the StarBites approach enabled the teaching of healthy eating messages in general?
- To what extent and in what ways has the StarBites approach been effective, specifically in relation to drama as a medium to deliver healthy eating messages.

Why have I been chosen?

You have been chosen because you are a professional who has had some involvement in the StarBites project, working with children to produce an activity for the StarBites performance.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

What will happen if I take part?

The researcher will contact you by telephone to ask if you are willing to take part in the study. If you are, then a mutually convenient date, time and place will be arranged in order that you can be interviewed about your involvement in the StarBites project. The interview will last approximately one hour and with your permission will be audiotaped.

What are the possible disadvantages and risks of taking part?

There are no disadvantages or risks foreseen in taking part in the study.

What are the benefits of taking part?

You may enjoy the opportunity to reflect on your work, your involvement in the StarBites project and the possible benefits for the children involved and their parents/cares.

Will my taking part in this study be kept confidential?

Taking part in the study is anonymous and no names or details that could identify you would be used in any verbal or written report of the study, unless you had given your express consent. Nobody need know that you have taken part.

What will happen to the results of the research study?

The results of the study will be used to inform the development of the StarBites project within Halton's HLP. A written report of the study will be produced but, as already explained, nobody who takes part in the study will be identifiable.

Who is organising and funding the research?

Halton's Healthy Living Project is funding the research. Researchers from the Centre for Public Health Research, University College Chester, are carrying out the study.

Who may I contact for further information?

If you would like more information about the study before you decide whether or not you would be willing to take part, please contact Stephanie May on 01244 375444 extn.2024, or write to her at the Centre for Public Health Research, University College Chester, Parkgate Road, Chester, CH1 4BJ or email s.may@chester.ac.uk. Or please contact Catherine Perry on 01244 220364, or write to her at the Centre for Public Health Research, University College Chester, Parkgate Road, Chester, CH1 4BJ or email c.perry@chester.ac.uk.

Appendix 5

Interview schedule for teachers

Interview schedule for teachers

- The interviewee's role in relation to StarBites.
- Perceptions of the effectiveness of the StarBites approach in general.
- Perceptions of the effectiveness of StarBites approach specifically in relation to the performing arts as a medium to deliver the healthy eating message and in exploring any strengths and weaknesses of the programme from the interviewee's perspective.
- Exploration of experience of co-ordinating with members of Halton's HLP.
- Perceptions of the children/young people's attitudes to StarBites.
- Plans for future work to develop the healthy eating message.
- Any other issues that the interviewee thinks are significant in relation to StarBites.

Appendix 6

Comments from parent questionnaires

Comments from parents

What people enjoyed about the performance

Getting children to understand the importance of healthy eating
Enjoyed watching the kids perform
Because the children seemed to enjoy it and learn something about it
All the children being given a chance to perform
Performances, songs, costumes and variety of colours and the health issues they delivered
Our bit!
The food was nice too
Seeing the effort the children made to try and get the message across about being healthy
How entertaining the children's health views were
Everything
Children's participation and enthusiasm
Variety of the performances and also the high standard
It was different
Seeing the children and how much effort they had put in
The way the children put over the reasons for healthy eating
The children taking an active part
The children put their hearts into the performances and made you understand
Easy to understand messages in an entertaining way which the kids clearly enjoyed
I enjoyed the performance because it showed how healthily you can eat
All the hard work they must have done it was great

What did you not enjoy

They could have done with more microphones

Has the evening made you think differently about anything to do with food?

Reminds me to give the kids more fruit and less sweets
Eat more fruit
Drink more water
Eat less fat and sugar and to think more when preparing meals
I'm more aware of excess sugar and fat
To have a more varied diet and try to eat more healthily
More variety in giving fruit and vegetables to the children
Cooking well balanced meals
More variation in children's packed lunches and meals
Try to give the children prepared fresh food rather than fast food
Eat more fruit
Healthy eating doesn't have to be boring
Yes, it gave the children an opportunity to try a variety of fruit and vegetables presented in different ways e.g. smoothies
Eat plenty of fruit and vegetables and drink plenty of water
It reinforces what we already know. Reminds us of the importance of the reasons for this
Yes, because it showed how much sugar is in junk food

Is an evening like this a good way of getting healthy eating messages across?

Why?

Gets the message across but in a fun way for children to understand
The children take notice
It's a fun way to learn about being healthy especially for children

It educates you in a fun way
Children are getting more involved and they will learn that healthy eating is best
Take on board the messages being relayed
Especially for children it's more interesting than reading a book
It's original
Good for the children to learn
Better understanding for children
It's a proven fact that children learn more by active participation
Very entertaining as well as educational
Interaction/participation with an easy to understand overall message
Yes, because it showed the food clips and people will start eating healthily now
For the children to understand about healthy eating

Has the evening affected your family's eating habits?

The family has tasted more variety of healthy foods
Eating more fruit and drinking more water
Trying to swap sweets with fruit
To try and get my children to eat more vegetables and to be aware of what they are eating
Healthier lunches for school and work
Try to make all of us eat more fruit and vegetables
Children eating less junk food
Buying healthier food
Yes, my daughter took part in the performance and is keeping us in line at home!

Any other suggestions or comments about the evening?

It was nice to see different schools doing things together and the children seemed to enjoy it
Keep up the good work!
Every year there should be show to make all children of all ages aware of healthy eating
Very entertaining should do more
Good idea at break to have healthy food on offer to try to encourage people to try something new
Thoroughly enjoyed it the only thing was that some of the children couldn't be heard
The microphones were not ready for some people
No it was very entertaining
No everything was perfect and very enjoyable
Pleased to see Alder water being promoted as this is a local spring in Widnes, love to see more people drinking it. Great for the local area and people.