

**The viability of “Food and Health”
instructors in the Irish Primary School
setting.**

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Background

The “Pack a Punch- eat a healthy Lunch” Project is an initiative that was set up three years ago in the Midland HSE region by the “Midlands Schools” Health project. The aim of the project was to work with individual primary schools to facilitate them to set up their own healthy food policies using the whole school approach.

The project was evaluated after one year and the results seemed very positive at that stage. A second audit was carried out in year four of the project and again this audit also indicated that the intervention was a success in bringing about behavioural change.

There seemed to be a positive response to having the “pack a punch eat a healthy lunch policy in place”. With many interviewees reporting numerous advantages. However interviewees reported that in order to ensure the future success of the project there needed to be more input from influences out side the school environment.

Rationale

The Community Nutrition & Dietetic Service, through community partnership, has developed a peer-led nutrition initiative – The Food and Health Project. Members of the community are trained to become ‘Food and Health’ instructors who in turn facilitate food and nutrition courses in the Community. It is hoped to explore in this project the idea of training these ‘food and health instructors’ further and using them increase input into schools.

Aims and Objectives

Aim:

To determine the attitudes of school teachers’ / principals’ and parents to the concept of the Community Nutrition & Dietetic Service providing a non dietetic input into schools’ policy development through ‘Food and Health’ instructors.

Objectives:

- To carry out literature review

- To develop and administer a telephone questionnaire.
- To determine the progress of teachers and parents with policy development since training.
- To describe the possibility of using a non-dietetic facilitator in the school setting and to ascertain willingness to consider this role.
- To determine the thoughts of the participants on areas they feel they could aided.
- To collate information received and to carry out statistics using SPSS.
- To draw conclusions regarding participant attitudes to the proposal and make recommendations regarding future progress.
- To write up project as scientific paper.

Literature Review:

Currently in Ireland 39% of adults are overweight and 18% are obese. (National Taskforce on Obesity, 2005) Childhood obesity has reached epidemic proportions in Europe, with body weight now the most prevalent childhood disease. Griffin et al (2004) found that the rate of significant overweight children in inner city Dublin had trebled since 2000. Data from the UK suggests that these numbers could now amount to more than 300,000 overweight and obese children on the island of Ireland and they are probably rising at a rate of over 10,000 per year. (National Taskforce on Obesity, 2005)

In 2002, Pinki *et al* implemented a school based health promotion programme aimed at reducing risk factors for obesity and evaluated the implementation programme and it's effect on the school. The study found that 89% of the action points determined by schools in their school action plans were achieved, along with a positive change in school meals. Reasons for not achieving action points included shortage of time, staff sickness, and impending inspection by government teaching standards officers. Both teachers and parents expressed a high level of support for nutrition education and physical activity.

Kennedy *et al* carried out a study in 1999, to explore the role of 'Community Nutrition Assistants' (CNAs) in helping to increase coverage, by increasing access to local community

dietetic services, and to bring about positive changes in the determinants of healthy eating, within low income areas of Bolton, UK. The study found that CNAs efforts resulted in a four-fold increase in dietetic coverage of community nutrition services in the local community. The emphasis was not on nutrition education but about helping people to overcome barriers to eating healthily such as access to healthier foods. However, it was recognised that a firm policy must be put in place on what a CAN should not attempt. Also clear guidelines are needed on when a CAN should seek support from nutrition experts.

Warwick et al 2005 carried out interviews with pupils, staff and parents about the nature of health related work in schools. The study found that involvement with a local healthy school programme had enabled them to develop and implement a wide range of health-related activities. They believed that this had contributed to important changes within their school such as pupils physical health, emotional well being and pupils capacity to learn. Pupils highlighted that they needed to feel that a healthier diet was a routine feature of school life – not a choice that made one feel stupid. They also appreciated being listened to and being involved in the policy development process.

In 2005, Hamdan *et. al.* studied peer-led school-based nutrition promotions in schools in Minnesota in USA and examined the benefits of student involvement in promoting lower-fat foods. It found that students with a high level of involvement in nutrition based promotional activities reported more positive attitudes toward healthful eating. The study also indicated that youth may prefer to deliver health education themselves and to receive it from their peers.

In 2000 Barton examined the effect of nutrition intervention, using the Balance of Good Health Model, on the composition of packed lunches of 10-11 year old schoolchildren. A questionnaire was administered to parents in order to discover their views on healthy eating for their children. A significant difference in the carbohydrate content of the lunch boxes was observed post intervention. There was also greater compliance on fat, protein and riboflavin. Consistent with results from previous studies, iron and calcium were found to be lower than the recommended amount. No significant difference was found when lunch boxes were scored against the Balance

of Good Health. All children recognised the importance of healthy eating for their children but felt the largest barrier to changing children's eating habits were the child's likes and dislikes. The study also highlighted the need for more education both inside and outside the school.

A study was carried evaluating primary school children's attitudes and knowledge of fruit and vegetables by Edwards & Hartwell in 2002. Pupils showed an awareness and understanding of current recommendations for a balanced diet, although the message has become confused. The study determined that if fruit and vegetables are to form part of a balanced diet, the 'health message' needs to be clear. Fruit is well liked, while vegetables are less acceptable, with many being poorly recognised.

In Britain, Canada and the United States, the impetus for initiating school nutritional policies has come primarily from the health, not education, agencies. School Personnel responsible for implementing nutrition policies may have little expertise in nutrition, while those with nutrition expertise may have relatively little connection with schools. The consequence is that no one is committed strongly to school nutrition policy development (Rose & Falconer 1990). To enhance the successful development and implementation of school nutrition policies, greater partnership between health and education agencies is recommended throughout the policy process (McKenna et al 2000). However, experience has shown that the adoption of a policy is no guarantee of successful implementation (McLaughlin 1987).

Methodology:

Data Collection:

The evaluation involved 8 primary schools who attended "Pack a Punch – Eat a Healthy Lunch" training in October 2005. A letter informing participants of a forthcoming telephone questionnaire was posted to all involved. This included 14 teachers and 8 parents. A telephone questionnaire was chosen as the research method of choice because they are low in cost compared to face to face interviews in terms of time and travel, they can be conducted at a fast pace, which gives results in a shorter time. These advantages were suitable for this study due to time constraints and the wide geographical area.

Results

1. Sample

8 parents and 14 teachers from eight schools attended the original “Pack a Punch Eat a Healthy Lunch” training session in October. Contact was made with 4 parents and 8 teachers and the telephone questionnaire was completed.

Each school is represented in the study. Six of the schools were located in rural areas while the remaining 2 schools were in urban areas. The mean number of pupils enrolled in the schools was 170 (+/- SD 126.8). One of the schools was all boys while the remainders were mixed gender schools.

2. Food and Health Instructors:

All of those surveyed believed that food and health instructors would be of benefit to their particular schools.

- The main skills they believed that such instructors would require were:
 - (i) Good communication skills – “Able to talk to parents, children and teachers.”
 - (ii) Good nutritional knowledge
 - (iii) Be informative and knowing the needs of schools

- Main issues with regard to food and health instructors:
 - (i) Frequent Contact – “Attend the school on at least a yearly basis to reinforce to parents what the school is saying with regards to the policy. So it doesn’t seem like the school is making up pointless rules”
 - (ii) Regular visits to the school – “2-3 time per year.”

- (iii) Compare schools policy with other schools and give ideas on developing policy further.
- (iv) Ability to address advertising misconceptions.
- (v) Address issue of childhood obesity
- (vi) Education of parents- Information evening similar to training staff were given
- (vii) More talks to parents and children

3. School Policy Development

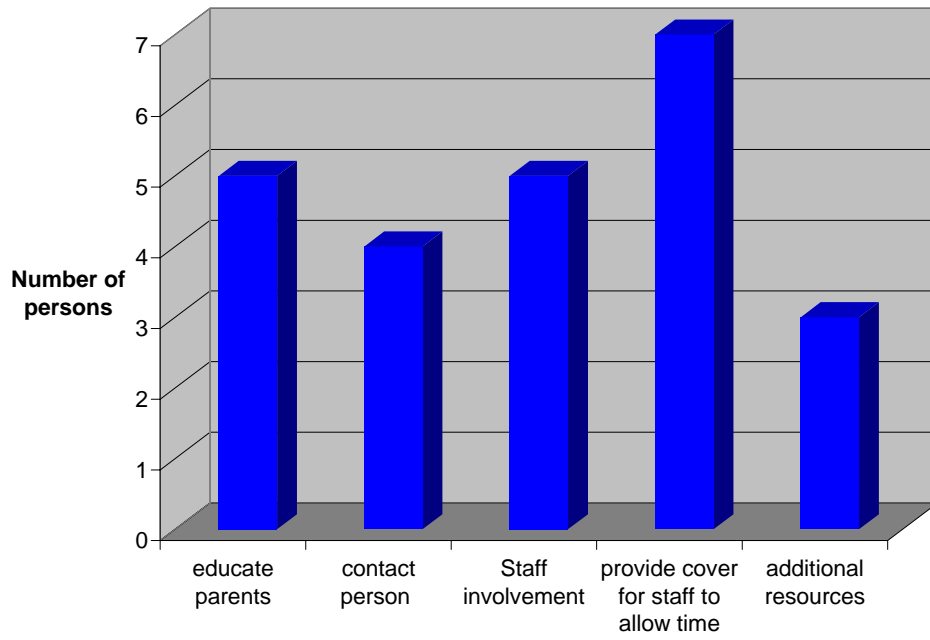
All of the schools surveyed had a policy in place. However, only half had a written policy with the remainder verbal. 50% of those who had a written policy in place used the policy development process as outlined in the “Pack a Punch- Eat a Healthy Lunch”. The majority of schools only had the policy in place in the previous 2 months following training. However, one school had implemented a policy 4 years ago and made alterations to it based on knowledge gained from training.

Only half of the schools intended to review the policy on a yearly basis. Similarly, only half of the schools had circulated written guidelines to all staff, parents and pupils.

The main issue to putting a policy in place was lack of time while all those questioned felt they had received enough training to confidently develop a policy.

When asked how difficult they found setting up the policy the majority found that it was relatively easy to achieve.

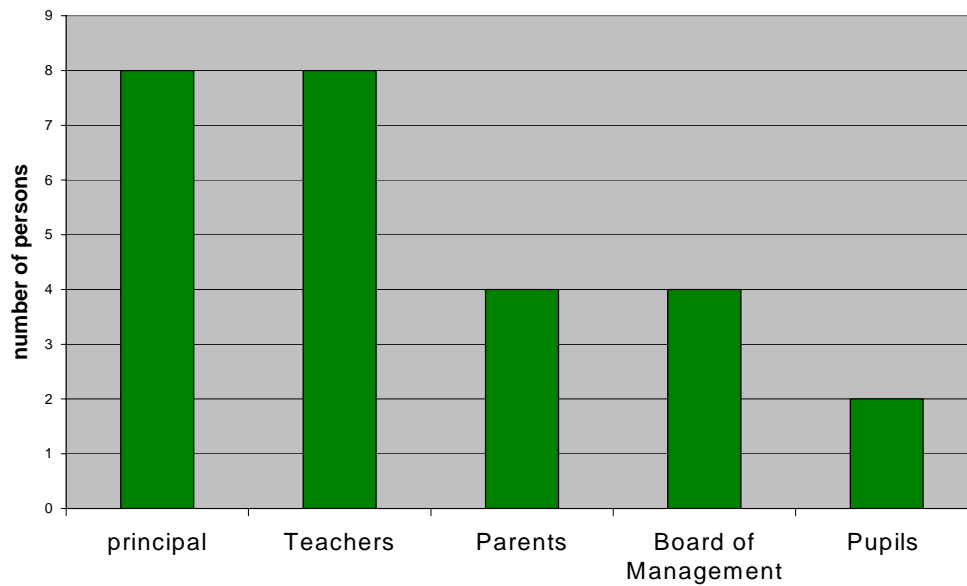
Support Needed to Create Healthy Eating Policy



Setting up the policy



Those Involved in Policy development



4. Specific Guidelines

1. Banned Foods:

All except one of the schools had specific food bans in place. The school that did not have bans wished to encourage children to make healthy eating choices themselves rather than having teachers enforcing bans. Foods banned from children's lunches included sweets, chocolate, crisps, fizzy drinks, chewing gum and popcorn.

2. Treats:

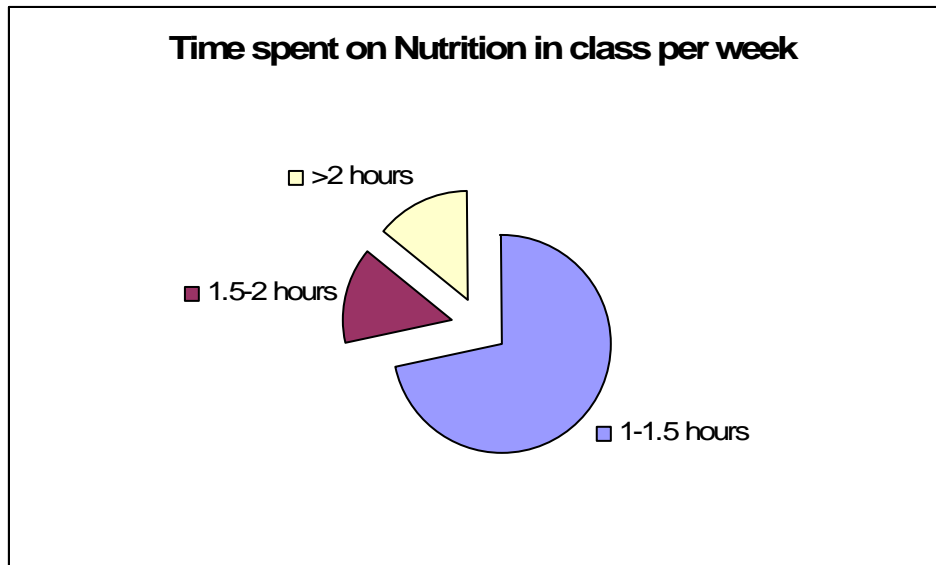
A quarter of the schools surveyed allowed treats on certain days of the week. The remainder did have treats, as they were discouraged at the training session. One school had introduced pencils and star stickers as rewards instead of sweets which were given previously.

3. Other guidelines introduced included:

- Healthy eating week once a month.
- Encouraging water consumption during class time in 4 schools.
- Children must have one piece of fruit in their lunchbox every day.
- Increased physical activity in all schools.
- Homework clubs providing sandwiches and fruit for students after school.

All schools found that nutrition awareness had increased within the school. The majority of the schools spend between an hour to an hour and a half on nutrition education in class. Three teachers reported incorporating it into the SPHE lessons. Only half of the teachers contacted are

utilising the resources in the “Pack a Punch- eat a healthy Lunch” booklet with their classes.



5. Response to policy implementation

All those surveyed believed that the response to the policy has been good. Most parents and pupils appear happy with the policy. However, one school principle reported that feelings had been mixed among some parents, “Who are they (the school) to tell us what we can and cannot feed our children”.

Both parents and teachers alike found that the pupils had expressed a genuine interest in the policy and were benefiting from its implementation.

Advantages of having a policy:

✓ The main advantages which teachers expressed were:

“Increased awareness of the importance of nutrition among staff.”

“Increased awareness among children and healthier eating.”

“Parents are making more healthy food choices for their children.”

“Children are calmer with no sugary foods- they’re not as hyper in class.”

“Less litter around the school – no sweet wrappers”

- ✓ The main advantages which parents expressed were:

“It’s the school rules so kids don’t complain about their lunches to us (parents)”
“They (children) aren’t comparing what they get for their lunch to the others.”

Disadvantages of having a policy:

- ✗ The main disadvantages which teachers expressed were:

“Children bring chocolate spread in sandwiches”
Increased portion sizes – “ Parents are packing more sandwiches than before to replace lack of bars and crisps”.
“The young kids are being sent in huge apples that they can’t manage”
“Some parents argue that it’s us (teachers) making up the rules and they won’t listen to us.”

- ✗ Some disadvantages which the parents expressed:

“I don’t know what to give them instead for snacks – I need more ideas”
“Finding different sandwich fillings that are healthy but they (children) won’t get bored with.”

Conclusion and Discussion

The school years are a great time to help children form positive attitudes towards food and physical activity and develop good eating practices. During this time, children are very open to learning new ideas and concepts. Learning how to choose and enjoy many different nutritious foods in childhood can provide the foundation for a lifetime of healthy food choices (DOH 1999). If we can target children in primary schools, we have a better chance of succeeding with implementation of healthy eating guidelines.

Food and Health Instructors (FHI's)

This study has highlighted that primary schools are keen to receive further nutrition input. There was an excellent response from both teachers and parents. Although contacted during school time teachers were very willing to spend time answering the questionnaire. They were very responsive to the idea of food and health instructors aiding the school in the development of a healthy eating policy. The main needs which they wished the FHI's to fill were, to give talks to parents and aid in educating them. Teachers appear to feel that they do not have the authority to address some parents on the healthy eating policy.

The main skills which FHI would require are good communication skills, a suitable level of nutritional knowledge and the ability to tailor their skills to the needs of schools. Each school would need visits at frequent intervals from FHI's. Most respondents suggested visits once a term for review of the policy or talks to parents and pupils.

One of the main conclusions, which can be drawn from this study, is the fact that the training evening was a great success. All teachers felt they had received enough training, and they felt that food and health instructors should receive a similar amount of training. However, they believed that an external person, such as a FHI, would have the authority to command the attention of both pupils and parents alike. One teacher suggested a FHI would have a similar role to that of the dental nurse who attends the school to promote good dental hygiene.

The need for a contact person was one of the main supports required for the development of a policy. Therefore, a FHI maybe the ideal means encouraging the development of a written policy, which could be circulated to all parents.

Policy Development

5 of the 8 schools surveyed reported that it was easy to set up a healthy eating policy and the majority didn't see it as extra work for them. This implies that having such a policy is an achievable goal to set for all primary schools. One school reported that a student teacher was involved in helping with the formal write-up of the policy. The necessary support mechanisms need to be in place for the successful running of the policy. This includes regular staff training, education of parents and a contact person being provided.

Research into school-based intervention schemes for healthy eating demonstrates that the school is the perfect setting for teaching children about good lifestyle practices. Initiatives should involve all children in a school, should target the whole school environment, and be behaviourally focused (Warren *et al*, 2003). One of the main conclusions, which can be drawn from this study, is that the Dietetic service must play a role in supporting schools in the development of healthy eating policies.

Recommendations

From this study it has become apparent that schools need greater support from the dietetic service. The introduction of Food and Health Instructors appears to be the most viable option.

- Food and Health instructors who are currently working in the community should receive further training to increase nutrition input in schools.

- Training should take the form of that similar to the “Pack a Punch – Eat a Healthy Lunch” training received by teachers. Communication skills should also be greatly emphasised.

- Food and Health Instructors must be made aware of their limitations with regard to nutrition. If in doubt, they should always consult a dietitian rather than giving misinformation.

- Food and Health Instructors should visit each school 3-4 times in the school year. These visits should take the form of:
 1. Yearly review of healthy eating policy with staff.
 2. Education session with parents regarding healthy eating, portion sizes, and labelling.
 3. Visit of “fibre man” with education on food pyramid and encouraging healthy eating among children.

- The first food and health instructors should be piloted on a small number of schools. A study ought to be carried out 6 months post their introduction. This should examine:
 1. Their ability to promote formulation and reviews of healthy eating policies in schools.
 2. Views of teachers on their effectiveness.
 3. Any issues which may require further education or training.

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21 November 2005

Dear.....,

Following on from the 'Pack a Punch - Eat a Healthy Lunch' policy training that you attended in October, we would like to contact you to discuss further your opinions and thoughts on school policy development.

We hope to begin contacting participants by telephone during the week of the 28th November 2005.

If you do not wish to be contacted please telephone 086 6012160 by the 25th November 2005.

I look forwards to speaking with you in the near future.

Yours sincerely,

Sonja Kleeman
Student Dietitian
Health Service Executive - Midland Area

Charlotte Johnston
Senior Community Dietitian

Primary Schools Initiative - Telephone Questionnaire

Name of School: _____

Q.1. Are you a:

- (a) Parent
- (b) Teacher
- (c) School principal

A. Demographics

Q.2. Are the schools pupils:

- (a) All boys
- (b) All girls
- (c) Mixed Gender

Q.3. Where is the school located?

- (a) Urban
- (b) Rural

Q.4. Approximately how many pupils attend the school? _____

Q.5. How many teachers are employed in the school? _____

B. Food and Health Instructors

Recent research has shown that schools would like some active participation of HSE in the school setting. Due to the unavailability of Community Dietitians for school visits, it is hoped to explore other methods of enabling this. At present members of the community are trained as

'Food and Health' instructors. We wish to explore the idea of training these 'food and health instructors' further and using them to increase nutrition input in schools.

Q.6. Do you think this would be of benefit to your school?

- (a) Yes
- (b) No
- (c) Don't Know

Q.7. What extra skills do you think an instructor would require if they were to go into a school?

Q.8. What would be your main issues be with regard to such an instructor working in schools with food policy development activities?

Q.9. Do you have any further ideas on how there maybe more nutritional input in the school?

C. School Policy Development

Q.10. Has the school put a policy in place with regards to nutrition and healthy eating since the "Pack a punch – Eat a Healthy Lunch" training meeting?

Yes No

Q.11. Was the policy development process as outlined in the "Pack a Punch – Eat a Healthy Lunch" booklet used to create the policy? _____

Q.12. What were the main issues to putting a policy in place?

- (a) Not enough time
- (b) Require further assistance or training
- (c) Lack of interest
- (d) Lack of resources
- (e) Other

Please specify _____

Q.13. What support is needed to create healthy eating policy?

- (a) Educate parents
- (b) Contact person / dietitian
- (c) Further Training
- (d) Staff involvement
- (e) Provide cover for staff to allow time
- (f) Additional Resources
- (g) Other

Please specify _____

Q.14 Is the policy:

Written Verbal

Q.15. Who was involved in designing the policy?

- (a) Principle (b) Teachers
- (c) Parents (d) Board of Management
- (e) Pupils (f) Other, please specify _____

Q.16. Has setting up the policy been:

(a) Easy to achieve

(b) Extra work

Q.17. What, if any, additional resources are required? _____

Q.18. How long has the policy been in place? _____

Q.19. How often will the policy be reviewed? _____

Q.20. Have the guidelines been circulated to all staff, parents and children? _____

D. Specific Guidelines

Q.21. Are there bans on certain foods?

Yes No

Q.22. If so what are they?

(a) Chocolate (b) Crisps

(a) Fizzy Drinks (d) Other (please specify) _____

Q.23. Are treats allowed?

Yes No

If yes, describe what the treats are and how often?

Q.24. What other guidelines have been introduced?

Q.25. Approximately how many hours are spent on nutrition in class each week? _____

Q.26. Has awareness of nutrition increased within the school environment?

Yes No

Q.27. Are the resources in the 'Pack a Punch – Eat a Healthy Lunch' booklet being utilised?

Yes

No

Don't Know

E. Response to policy implementation

Q.28. In general how has the response to the policy been?

Good

Poor

Mixed

Q.29. Have parents responded positively to the initiative?

Yes No

Q.30. Have the children expressed much interest in the new policy?

Yes No

Q.31. What have been the main advantages? _____

Q.32. What have been the main disadvantages? _____

Q.33. Are the 5th / 6th classes carrying out peer education?

Yes No Don't Know