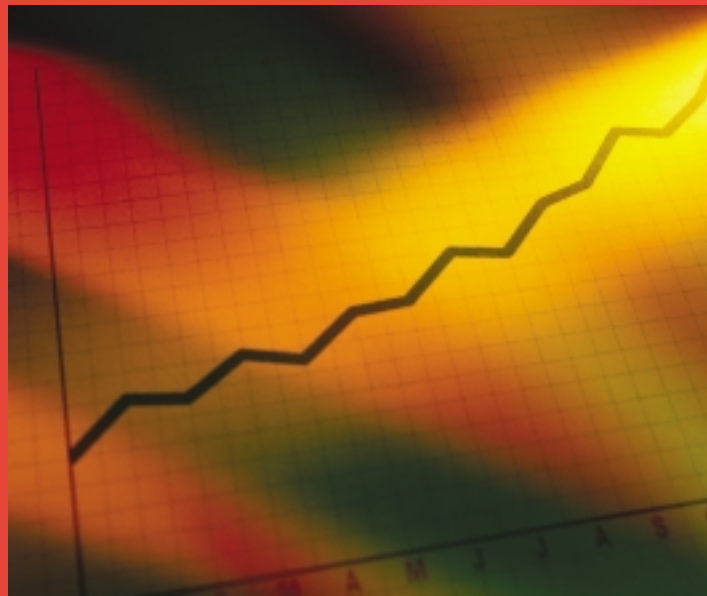


# Research and evaluation review

2002-2003



**Health**  
Promotion  
Agency

# Research and evaluation review

2002-2003



**Health**  
Promotion  
Agency

# Foreword

Each year the Health Promotion Agency for Northern Ireland carries out a range of research and evaluation related to its own programmes and to the work of promoting health. This review of research and evaluation work reflects the work carried out by the HPA in 2002-2003.

The HPA supports regional health promotion and public health initiatives by disseminating knowledge and evidence of effective approaches and interventions. This year's review reports on evaluations of public information campaigns on smoking and physical activity, pilot projects in schools aimed at increasing children's consumption of fruit and physical activity levels, and research to support the introduction of nutritional standards for school meals and efforts to reduce antibiotic use.

Through this information the HPA encourages collaboration with all those working to promote the

health of the public in Northern Ireland. Wider access to research information will help to ensure better use of resources. This information will be of use to those involved in public health in Northern Ireland, whether they have a professional involvement or an organisational or personal interest.

The research and evaluation initiatives described have been carried out within the priority areas and programmes of work which the HPA has been commissioned to deliver on a regional basis.



Dr Brian Gaffney  
Chief Executive  
Health Promotion Agency for Northern Ireland

# Contents

## PAGE

### Alcohol, tobacco and other drugs

'Every cigarette is doing you damage': evaluation of phase II of a public information campaign .....	5
Follow up of callers to the smokers' helpline .....	8
Evaluation of No Smoking Day 2003 .....	10

### Nutrition

Evaluation of the Fresh Fruit in Schools pilot project .....	12
Training needs assessment of school meals staff in Northern Ireland .....	14

### Physical activity

Review of physical activity campaign research, 1999 to 2002 .....	18
Evaluation of the Class Moves! pilot programme .....	21
Evaluation of the Get Active in the Community Awards scheme 2002 .....	23

### Campaign related research

Research to support the Antimicrobial Resistance Action Plan (AMRAP) .....	25
----------------------------------------------------------------------------	----



# 'Every cigarette is doing you damage': evaluation of a public information campaign

The second phase of the HPA's latest tobacco public information campaign was launched on 8 January 2003 and ran until 31 March 2003. It targeted adult smokers, aiming to convince them of the urgent need to stop smoking and to highlight the support available to smokers who are trying to quit.

Four television advertisements formed the main element of the campaign. Two advertisements, 'Brain' and 'Artery', were adapted from a campaign developed by the Commonwealth Department of Health and Aged Care, Australia, which had proved to be effective in reducing rates of smoking there. The advertisements also addressed an issue raised during qualitative research with smokers in Northern Ireland, which indicated that, while people appeared to have a general knowledge that there is a link between smoking and ill health, there was little understanding of the relationship between smoking and specific health problems such as heart disease and strokes.

A third advertisement, 'Help and Support', was designed to give smokers encouragement and advice on how to go about giving up smoking. Two versions of this advertisement were produced, one aimed at men featuring two football fans, and a second aimed at women showing a stressed mother of small children. Both advertisements highlighted the help and support available to smokers who are trying to quit, including nicotine replacement therapies (NRT) and a freephone helpline service funded as part of the campaign.

The final television advertisement was aired solely to promote the helpline service. Qualitative research indicated that many smokers would not contact a helpline, apprehensive of the reception they would receive from the helpline operator. This advertisement is designed to show potential callers that they will be greeted by a friendly and helpful operator when calling the helpline.

There was also a series of radio advertisements, all aimed at promoting the helpline by portraying scenarios or reasons why smokers might need to call

the helpline (such as how to survive the smoking break at work or how to avoid the temptation of smoking with a drink when out with friends).

Billboard posters and advertisements on the side and inside of buses reinforced the campaign slogan 'Every cigarette is doing you damage' and promoted the helpline number.

## Aims

To evaluate the impact of the 'Every cigarette is doing you damage' public information campaign in 2003.

## Main objectives

The focus of the evaluation was to address the following:

- to assess the advertisements' effects on actions to quit;
- to detect a proportional shift in smokers' positions according to the 'stages of change' model;
- to provide evidence for the specific informational effect of the campaign, ie an increase in knowledge on items that relate to campaign specific messages;
- to appraise awareness of, and learning from, the campaign.

## Methodology

Quantitative research was carried out to evaluate the effectiveness of the campaign in its second year. This was designed to allow for comparison with the pre-campaign survey baseline (December 2001) and the previous phase I evaluation survey (April-May 2002). It also allowed for an assessment of the effectiveness of the new elements of the campaign.

As around 29% of the population in Northern Ireland smokes, a telephone survey was decided to be the most efficient method of reaching the large sample of smokers required to facilitate sub-analysis of the data in the time available. The survey was implemented using Computer Assisted Telephone Interviewing.

The questions asked in the pre-campaign study addressed health beliefs and attitudes towards smoking held by smokers and non-smokers, and quitting intentions and activity among smokers and recent quitters. These were repeated in phase I of the evaluation survey with additional questions included to assess the impact of the 'Artery' and the 'Help and Support' advertisements. This second phase of the evaluation built upon these with the inclusion of the 'Brain' and 'Smokers' helpline' television advertisements, poster campaign and the radio advertisements.

## Sample

The phase II evaluation survey involved a duplication of the sampling technique used in the 2001 baseline study and 2002 campaign evaluation. A simple random sample of telephone numbers was drawn from an electronic copy of British Telecom's domestic listing. Each household in the sample was contacted. In the first instance the interviewer made contact with a person aged 18 or over and this person was then asked to provide information on the characteristics of all persons aged 18 or over living in the household. This information related to age, gender and whether each person was a smoker/recent quitter or non-smoker.

Up to two smokers or recent quitters and one non-smoker could be selected to participate in the survey. In cases where there were more than two smokers/recent quitters or more than one non-smoker, a Kish Grid (random selection procedure) was applied to select individuals.

Smokers/recent quitters and non-smokers were then selected from households on the basis of quota controls for sex, age and Health and Social Services Board area.

## Response

Fieldwork for the phase II evaluation began on 8 April 2003 and was completed on 3 May 2003. A sample of 1,285 people was achieved, comprising 745 smokers/recent quitters and 540 non-smokers.

## Key findings

### Advertising awareness

Respondents were prompted by the interviewer with descriptions of each of the advertisements used in the campaign. The 'Brain' advertisement (which was

first viewed in 2003) was recognised by 91% of respondents. Recognition of the 'Artery' advertisement fell from 94% in 2002 to 83% in 2003. Recognition of both the 'Help and Support' advertisements remained constant between the two years, with 62% remembering the male version and 70% the female version.

The 'Smokers' helpline' advertisement and the poster campaign, both new in 2003, were recognised by 62% and 61% of respondents respectively. A lower level of awareness, 11%, was reported for the radio advertisements.

Across all the advertisements of the 2003 campaign there was an average recognition level of 63%. Removing the radio advertisements increases average awareness to 72% suggesting that, as in 2002, the advertisements for the 'Every cigarette is doing you damage' campaign are highly salient.

### Did the campaign make smokers think about quitting?

Each advertisement was evaluated to assess whether smokers and recent quitters regard it as thought provoking, believable and relevant, and whether it would encourage them to stay off cigarettes.

In both 2002 and 2003 the 'Artery' advertisement was reported to be the most thought provoking with 69% describing it as 'very thought provoking' in both years. The 'Brain' advertisement was considered thought provoking by 68% of respondents in its first year (2003). Both the male and female 'Help and support' advertisements were considered more thought provoking in 2003 (17% and 31%) than in 2002 (11% and 23%).

In 2003 70% of respondents found the 'Brain' advertisement to be believable. Believability was 47% for the female version of the 'Help and support' advertisement and 28% for the male, 31% for the 'Smokers' helpline', 37% for the radio advertisements and 39% for the poster campaign.

Approximately one third (32%) of respondents found the 'Brain' advertisements to be relevant to them. In addition 23% of smokers and recent quitters reported that the 'Brain' advertisement would 'very much' encourage them to stay off cigarettes.

Smokers who were exposed to the campaign were asked "Thinking about this campaign as a whole, did it make you more likely to quit, less likely to quit or has it made no difference?". There was a slight decrease from 58% in 2002 to 56% in 2003 in the number of smokers reporting that the campaign made them more likely to quit smoking. However, the number of recent ex-smokers reporting that the campaign as a whole had helped them to stay off cigarettes increased from 68% in 2002 to 72% in 2003.

### Changes in health beliefs and attitudes

All those surveyed (smokers and non-smokers) were asked if there were any illnesses caused by smoking. There was an increase in the number of people reporting that smoking causes 'stroke/vascular diseases' from 6% at baseline to 21% in 2003, a rise from 3% at baseline to 9% in 2003 in the number citing blocked arteries and a rise from 42% to 57% in people identifying heart disease/heart problems. As in 2002 there was little change in awareness of illnesses that were not addressed by the campaign.

### Changes in quitting intentions

The stages of change model and the one year quit rate are used to assess quitting intentions over different time periods.

The stages of change model assessed whether smokers were in a state of pre-contemplation, contemplation, preparation or action in relation to giving up smoking. The results when compared from 2002 to 2003 show a 2% increase in the percentage of smokers in the preparation stage of quitting smoking and a 1% increase in those at the action stage. If these quit attempts were to be successful, this 3% shift would represent a total reduction in the population of smokers in Northern Ireland of around 10,040.

The one year quit rate (ie the proportion of smokers who had tried to quit in the past year) increased from 19% at benchmark to 24% at follow-up and to 31% in 2003, suggesting that an eventual reduction in population smoking prevalence may result.

### Getting help to quit

Between 2002 and 2003, there was little change in how smokers sought help to quit. Nicotine

replacement therapy (gum or patches) is the most frequently used method of assistance, reported by 25% of those taking action to help them to quit. This was followed by reading 'quit literature' (24%), asking the doctor for help (18%), other (unspecified) action (11%), buying other quit products (9%) and asking the pharmacist for help (8%). The smokers' helpline was accessed by 5% of those smokers who reported having taken action to help them quit.

## Recommendations

The campaign appears to have had strong impact on educating the public about the specific health effects of smoking. Where the campaign targeted specific smoking related illnesses, such as stroke and blocked arteries, awareness of those illnesses rose considerably. Continuing low awareness of other smoking-related illnesses, such as respiratory disease or emphysema, suggests that these could usefully be highlighted in further phases.

The rise in quitting activity (within the last year around an additional 10,000 smokers were preparing or attempting to quit) highlights that the campaign is effective in contributing to motivating smokers to quit; however, evaluation of the helpline (see following page) suggests that there is a need to increase the number and types of service available to support smokers in the quitting process.

## Dissemination

The results of the phase II evaluation will be available as a pdf from the HPA's website in 2004 at [www.healthpromotionagency.org.uk](http://www.healthpromotionagency.org.uk)

The baseline study and phase I evaluation were originally published on the HPA website in February 2003 in:

*Every cigarette is doing you damage: evaluation of phase one of a public information campaign.*

This publication is still available as a PDF on the HPA website.



# Follow up of callers to the smokers' helpline

In January 2002, the HPA launched an anti-tobacco campaign aimed at adult smokers entitled 'Every cigarette is doing you damage'. A free interactive telephone helpline service was established as part of the campaign. The helpline was staffed by trained counsellors and provided advice and information, including tips on how to give up and stay off cigarettes, and general support and encouragement. The helpline service also sent out a booklet providing information about stopping smoking to those who requested it. The helpline was in operation from the launch of the campaign on 8 January until it finished at the end of March 2002.

## Aim

To evaluate the impact of a telephone helpline on callers who used the service during the 2002 mass media anti-tobacco campaign.

## Main objectives

These were:

- to assess use of, and overall satisfaction with, the helpline service;
- to assess smoking behaviour change among smoking callers to the helpline after six months;
- to ascertain the number of quit attempts that may have resulted from use of the helpline;
- to examine failure or success of quit attempts and the reasons that contribute to both;
- to assess what, if any, additional support may be required to inform similar work for future campaigns.

## Methodology

A telephone survey of a sample of callers to the smokers' helpline was carried out.

## Sample

The helpline service provided a sample of 394 callers. This consisted of the contact details of every tenth caller to the helpline who agreed to be contacted for follow up. Of these, 24% were invalid contacts due to insufficient contact information being recorded or the callers having changed contact details. Of 301 useable contacts, 131 interviews were conducted, a response rate of 44%.

## Key findings

Overall, 75% of the sample smoked cigarettes daily, 21% were non-smokers (phoning on behalf of others or in the process of quitting) and the remaining 4% were occasional smokers (smoked once a week or less).

The vast majority (93%) had contacted the helpline on their own behalf. The main reasons given for contacting the helpline were:

- to obtain support and encouragement in relation to the quitting process (63%);
- to obtain written information (58%);
- to obtain advice on a specific query, eg use of nicotine replacement therapies (53%).

Of those surveyed, three out of four requested a copy of the campaign related booklet *Stopping smoking made easier*.

The helpline was considered to be most effective in raising awareness about:

- the health dangers of smoking (78%);
- the health benefits of stopping smoking (77%);
- nicotine replacement therapies as an aid to stopping smoking (68%).

Four out of ten callers were encouraged to seek further help, with the main source of help reported being from a GP and/or nurse, followed by a smokers' clinic or a pharmacist.

Of those who had recently quit, or who smoked and were preparing to quit, 67% said that the helpline was one of a number of reasons for their attempt to quit smoking. Fifty six percent said that the helpline service had encouraged them to think seriously about quitting within 30 days of contacting it.

Most respondents (94%) who had smoked or were current smokers had tried at some stage to quit smoking, 7 out of 10 of these in the past year. The number of successful quit attempts was low, with over half lasting no longer than three days (54%). In all, just 15% of those who quit but who took up smoking again lasted more than one week.

Positive action taken by respondents during their last quit attempt included the use of nicotine gum (45%) and quitting literature (45%). Respondents suggested that their lack of success could be attributed to lack of support due to the short term nature of the helpline and lack of referral to other services.

Eighty nine percent of respondents who smoked were seriously considering another quit attempt in the next six months. Only 7% said they were not considering another quit attempt in the next six months.

Satisfaction with the overall service provided by the helpline was high with 72% of respondents being either very or quite satisfied. Over three quarters (77%) of respondents would recommend the smokers' helpline to other smokers.

## Recommendations

Helpline users expressed a need for more regular contact and follow up from helpline staff. As the helpline only ran for the three months of the television advertising campaign, this type of help was not available. A longer term helpline would provide a regular source of help for those who did not have a local cessation service to attend. Callers also expressed the need for more local information on smokers' clinics and support groups.

This initial evaluation highlights the need for a more regular long term follow up of callers to the helpline to properly evaluate the service. The findings from this survey are only indicative as the sample is not proportionally representative of all callers to the helpline. Recommendations have been made on how the helpline service could assist in compiling contact information to ensure a more proportional and robust sample for future work.

# Evaluation of No Smoking Day 2003

No Smoking Day (NSD) is a UK campaign funded and run by an alliance of health promotion bodies and professional and voluntary organisations. The campaign is targeted at all smokers and aims to help and support smokers who want to stop smoking.

NSD uses a media campaign based on news and feature stories, advertising, and local events and activities using the campaign materials. The 2003 campaign, which was the 20th NSD, took place on Wednesday 12 March and the slogan was 'Sick of smoking?.'

## Aims

The three key aims of the day are:

- to encourage and assist smokers who want to quit;
- to make as many people as possible aware of the campaign;
- to involve as many individuals and organisations as possible in activities relating to smoking cessation and education.

## Main objectives

These were:

- to establish smoking prevalence;
- to establish how smokers feel about stopping smoking;
- to assess awareness of NSD 2003;
- to assess participation in NSD 2003;
- to assess awareness of NSD 2003 advertising and publicity.

## Methodology

The HPA provided funding so that the quantitative research carried out in Great Britain could be extended to Northern Ireland. The questions were entered into an omnibus survey, representative of adults aged 16 and over in Northern Ireland.

## Sample

The survey used a probability sample stratified by region with demographic quotas set on the basis of age, sex and social class characteristics. Interviews were conducted at 100 sampling points across Northern Ireland.

## Response

Fieldwork took place between 20-27 March 2003. A total of 1,018 interviews were achieved in Northern Ireland.

## Key findings

Just over one third (34%) of the sample currently smokes cigarettes. Only 1% smoked either a pipe or cigars. One fifth (20%) of respondents said they used to smoke but 'don't any more' and 45% said they had never smoked.

All cigarette smokers were asked about the number of cigarettes they smoked in a typical day. Half (50%) of cigarette smokers smoke between 11 and 20 cigarettes in a typical day. Over one third (36%) of current smokers smoke 10 or less cigarettes a day.

Two thirds of respondents who smoked (66%) expressed an interest in stopping or had tried to stop already, while 18% said they had no intention of stopping. In Northern Ireland those who were content with their smoking came from the AB socioeconomic grouping, smoked more than 20 a day or were aged over 55 years.

Eighty two percent of respondents in Northern Ireland were aware that Wednesday 12 March 2003 was No Smoking Day. As in previous years, awareness of NSD in Northern Ireland remains higher than in Great Britain as a whole (64%).

In Northern Ireland, awareness was higher among smokers (88%) than non-smokers (79%), and slightly higher among men (85%) than women (82%). Awareness was also generally highest among those who smoked between 11 and 20 cigarettes a day (91%) and lowest for those who smoked more than 20 per day (81%). Analysis by age group showed that awareness of NSD was highest for the 45-54 age group (87%) and lowest for those aged 55 years and over (78%).

Awareness was higher for those smokers who were trying to stop at the moment (100%, n=21) or those who had stopped smoking for a while but have

recently started again (98%). Awareness was lowest for those who had never thought about their smoking (77%) or who were content with their smoking (79%).

Overall, 29% of smokers who were aware of NSD in Northern Ireland participated in the day by quitting for a time, cutting down, accessing information or taking part in an event or competition. Participation was lower than in previous years.

The proportion of smokers in Northern Ireland who were aware of NSD, and made a quit attempt on the day, was 15%. This is slightly higher than in Great Britain (12%). A higher proportion of 35-44 year olds (24%) made a quit attempt compared to other age groups. Across social class groupings fewer C2s (13%) or DEs (10%) made a quit attempt compared to ABs (24%) or C1s (20%).

All respondents were asked if they had seen or heard any advertising or publicity for NSD. Awareness of publicity for the day increased from

61% in 2002 to 77% in 2003 (similar to the 2000 and 2001 campaigns). The 2002 campaign was the only one over this four year period that did not have a television advertising campaign to promote it. Awareness of publicity or advertising was slightly higher for females (81%), those aged 45 to 54 years (83%) and smokers (80%). In Great Britain a smaller proportion of people (46%) were aware of NSD advertising or publicity than in Northern Ireland.

## Dissemination

This information was published in:

*No Smoking Day 2003 evaluation report*. Belfast: Health Promotion Agency for Northern Ireland; and *Inform* Issue 30 Aug/Sept 2003.

The full NSD 2003 evaluation report including comparisons with Great Britain's findings from previous years can be obtained from the HPA and is also available as a PDF from the HPA website at [www.healthpromotionagency.org.uk](http://www.healthpromotionagency.org.uk)

# Evaluation of the Fresh Fruit in Schools pilot project

In 2002 the Investing for Health team secured funding from the Northern Ireland Executive for the development of the Fresh Fruit in Schools scheme. The primary objectives of this scheme were to deliver one piece of fruit a day to children in P1 and P2 in a bid to raise awareness of the benefits of fruit consumption, and instil healthy eating practices at an early age.

The Fresh Fruit in Schools scheme was developed as a two year pilot project, which was initially launched in November 2002 in 85 schools within the following Health Action Zones (HAZs): Armagh and Dungannon; Northern Neighbourhoods; Western; and North and West Belfast. The HPA was commissioned to evaluate a variety of aspects of the scheme. The evaluation is ongoing and will end in June 2004.

## Aims

The aims of the evaluation were:

- to assess the best means of delivering and distributing fruit into schools;
- to assess the impact this has on children's diets, and other effects on the child, the classroom, school, parents;
- to assess the sustainability and wider application of the project.

## Main objectives

These were to assess:

- the operation of the scheme, supply and distribution and sustainability;
- the impact on children's consumption of fruit;
- the effect on the classroom;
- the effect on the school;
- the impact on children's awareness of healthier eating and eating habits at home;
- other impacts.

## Methodology

To meet these objectives, a wide variety of groups is being surveyed using both quantitative and qualitative techniques. Work is also taking place with HAZ managers, school staff, children and parents.

## Evaluation with school coordinators

### Main objectives

The objectives of the school coordinators' survey were:

- to establish the methods of fruit distribution within schools;
- to establish the roles and responsibilities of individuals taking part in the scheme;
- to establish the reliability and quality of fruit deliveries;
- to provide an estimate of overall consumption of fruit within schools;
- to explore staff reactions to the scheme;
- to investigate staff use of resources;
- to establish the feasibility of integrating the scheme with the school curriculum;
- to establish views on continuation of the scheme.

### Methodology

Questionnaires were distributed by post to the 85 schools involved in the Fresh Fruit in Schools scheme. Schools were instructed that the fruit coordinator was to complete the questionnaire. The returned questionnaires were passed to an independent research consultant for analysis.

### Key findings

In total, 81 of the 85 schools taking part in the scheme returned the questionnaire, giving a 95% response rate. Fruit consumption was reported to be very high with 73% of P1 and 74% of P2 children eating all or nearly all of their fruit and a further 18% of P1 and 20% of P2 children consuming around three quarters of their fruit.

All coordinators believed the scheme to be a good supplement for children's diet and a good way of promoting health in young children. While 47% of staff initially had concerns about demands on their time imposed by the fruit scheme at its introduction, this decreased to only 23% at the first evaluation phase.

The majority of resources were welcomed, with between 50% and 84% of respondents citing the briefing pack, curriculum materials, promotional items, HAZ contact, briefing events and local launch as useful. The website proved less effective with only 20% of respondents citing it as useful; however, it is not clear from the results if all schools had access to web facilities.

Coordinators reported that parents' reaction to the scheme was extremely positive, with just 12% of schools reporting that they had a request from at least one parent to exclude their child from the scheme.

Coordinators also reported that the scheme had a number of benefits not directly associated with healthy eating, such as a decrease in the amount of litter (59%), an improvement in the atmosphere and ethos of classes, and improvement in pupil concentration levels (38%).

The vast majority (96%) said that participation in the scheme had helped with the teaching of aspects of the school curriculum. Specifically, 97% said it helped with the teaching of health education, while 82% said it helped with teaching science.

All school coordinators supported the continuation of the scheme. The only recommendation made by school coordinators was that the scheme should be extended to other year groups within their school.

## Evaluation with teachers

### Main objectives

The objectives of the teachers' focus groups were:

- to examine teachers' attitudes to the scheme;
- to identify practical problems encountered;
- to measure the use and value of the information resources;
- to report any known parental feedback;
- to identify early outcomes of the scheme on the children, classroom, school, community;
- to explore sustainability of the scheme and recommendations for change.

### Methodology

Focus groups were conducted with P1 and P2 teachers throughout the HAZs. Six focus groups were conducted in total to explore issues around teachers' views and perceptions of the

implementation and running of the Fresh Fruit in Schools scheme.

### Key findings

Teachers welcomed the scheme and found its day to day running was readily adapted to the school environment; however, classroom assistants were considered vital to the running of the scheme.

The scheme was found to complement other approaches the schools had taken to encourage healthy eating, with a number of teachers reporting the socialising skills of children were improving through eating the fruit in a group situation.

Informal parental feedback suggested great support for the scheme and evidence was seen that the scheme was having an effect on children not directly involved in it, as older brothers and sisters of P1 or P2 children were bringing fruit to school when they had not previously done so.

All teachers were willing to continue with the scheme and considered they had the necessary resources to do so, although some thought it was unfair that P3 children were not included in the initial group.

## Future developments

One of the main techniques being used to assess children's consumption of fruit is a questionnaire entitled 'A Day in the Life' (DILQ). This questionnaire was originally intended for self completion by children, but for this evaluation it is being completed via visual prompts and discussion using trained interviewers. This survey was carried out before implementation of the pilot and repeated to detect change in consumption mid way through the pilot in September 2003. It will be conducted again towards the end of the pilot in June 2004 and the results disseminated later in 2004.

## Dissemination

These results were presented to the Investing for Health team at the Department of Health, Social Services and Public Safety, the Fresh Fruit in Schools steering group and the HAZ coordinators.



# Training needs assessment of school meals staff in Northern Ireland

The document *Catering for Healthier Lifestyles* outlining nutritional standards for school meals was developed by the Department of Education in conjunction with the HPA and issued for consultation in December 2001. Some proposals included in the standards include limiting the provision of chips to twice a week and offering at least one type of fruit and one type of vegetable every day. The standards also contain guidance on cooking methods, including advice on reducing fat and salt content.

It is anticipated that training will be necessary to implement these standards in schools effectively; however, no up-to-date information is available on the current nutrition training of school meals staff. The HPA commissioned research to assess what training would be needed for school meals staff to allow effective implementation of the new standards.

## Aims

The aim of this research was to undertake a training needs assessment with school meals staff, in order to identify areas in which they will require training, resources or information to assist them to interpret and effectively implement *Catering for Healthier Lifestyles*.

## Main objectives

These were to explore issues for school meals staff arising from the guidelines, such as:

- awareness of the guidelines;
- understanding of the guidelines;
- motivation to implement the guidelines;
- perceived difficulties/barriers to implementing the guidelines;
- perceived training/information/resource needs;
- assessment of best means of delivering training/information/resources;
- examination of other issues for school meals staff, around healthy eating for children, that they feel impact on their ability to fulfil their requirement of providing healthy school meals.

## Methodology

A two-phased approach was implemented for this research, which involved both qualitative and

quantitative research. The qualitative research involved 10 depth interviews with randomly selected school meals area managers throughout Northern Ireland and was conducted in May 2002. Findings from the qualitative research aided development of a telephone survey questionnaire for kitchen unit supervisors which took place in September 2002.

## Sample

A 20% random sample was drawn from schools in Northern Ireland and was representative of management type and education and library board area. Findings from qualitative work indicated that staff anticipated that implementation of the standards may be more complex for the post primary school sector and for this reason the sample of post primary schools was boosted. In total, 332 interviews were carried out with kitchen unit supervisors in schools throughout Northern Ireland.

## Key findings

### Area managers' survey

Area managers were aware of the nutritional standards and had a high level of understanding of the reasoning behind the implementation of these standards. There were conflicting opinions, however, over whether the benefits of the standards were worth the upheaval of their introduction. However, those who felt it would be worthwhile to implement them did consider the proposed nutritional standards would need revised before final implementation. The majority of managers felt that the final approved version of the nutritional standards should be compulsory to ensure a consistent service to all schools.

Managers said they thought that the introduction of nutritional standards would benefit pupils by:

- guaranteeing them a healthy two course meal;
- encouraging them to choose the healthier option;
- ensuring a healthier lifestyle and future;
- allowing them to be more attentive in class, thereby acquiring more knowledge.

They also reported that the introduction of standards would give parents peace of mind that their children were receiving a nutritionally balanced meal. However, it was acknowledged that the introduction of these standards did mean less choice for the children.

The majority of managers thought the standards would give school meals staff the opportunity to use their skills in developing more nutritious meals and would also give the staff a sense of satisfaction.

A number of specific issues were raised with several of the standards which were considered very impractical to implement. These issues were related to reduction in choice for the consumer with the result that they may seek an alternative, eg bringing a packed lunch rather than taking school meals. These issues were thought to need more consideration in post primary schools than in primary; however, area managers were able to suggest potential ways to get round this problem.

Managers felt that more information would be necessary for pupils, parents and staff to ensure the successful implementation of these standards. It was regarded as important to take a whole school approach through implementation of additional school policies, such as not letting pupils out of school at lunchtime, and controlling the availability of junk foods from vending machines or on school property.

Introduction of the standards was expected to be more difficult in post primary than primary schools. These difficulties included restricting the choice for children and there was concern about cafeteria style meals as they provide both healthy foods and snack style lunches. Post primary schools anticipated a substantial reduction in customers after the introduction of these standards and they felt that if they offered a healthier alternative to chips they should be allowed to provide fried foods every day.

A number of areas were thought to be of great importance in terms of training, including how to implement the standards successfully, menu planning, portion sizes, health and nutrition, customer care, catering practices and marketing healthy foods. It was considered that training should be provided for area managers, kitchen unit supervisors, cooks, parents and pupils.

Some area managers observed that the key to the success of the new standards was a whole school approach and that the standards should be incorporated into the Best Value Fundamental Review of School Meals Service as this reviews the whole school meals service.

#### Kitchen unit supervisor survey

The majority of kitchen supervisors (94%) adhered to either formal or informal healthy eating policies within their schools. These policies included providing a selection of healthy foods (54%), or following specific guidelines set by their board area (32%). Other examples were the use of self set healthy menus (6%), providing oven cooked food instead of fried food (2%), promoting healthy eating days (2%), or being a member of the healthy eating circle (2%).

Around 76% of supervisors asked said they had a quite or very good understanding of the nutritional standards, while 17% said they had a quite or very poor understanding of the nutritional standards.

Interestingly, only 40% of supervisors from all schools agreed that the standards would help improve children's health, while 24% disagreed with this. More staff in primary schools (46%) were positive about the health benefits surrounding the school standards than in post primary schools (32%). However, when asked (unprompted) who would benefit most from introduction of nutritional standards, 84% of kitchen supervisors replied that pupils would benefit through better health and knowledge of healthier eating.

A quarter (25%) of supervisors thought they would also benefit from the introduction of the standards through greater knowledge of nutrition (52%), healthier diets for staff in canteens (11%), and decreased workload owing to less choice (7%). Nearly 15% also stated that parents would benefit from the introduction of the standards indirectly by receiving education about eating habits.

The majority of kitchen supervisors said they thought the perceived benefits of the standards did make implementing them worthwhile. Those who did not feel that implementing the standards would be worthwhile were concerned that the children would not eat the food they prepared, an observation noted equally by staff from primary and post primary



schools. Staff in post primary schools also thought the introduction of these standards would lead to a reduced number of pupils taking school meals and perhaps even the loss of school meals staff.

The supervisors were also asked to rate the importance of support from a number of groups or individuals. No significant differences were noted between primary and post primary in this area unless otherwise stated. The following were viewed as very important for the successful implementation of the scheme by the majority of supervisors:

- support from pupils (69%);
- support from parents (66%);
- support from principal/teachers (77%);
- the whole school approach (76%).

The greatest potential barrier the supervisors perceived to implementing the nutritional standards was that children would be reluctant to accept the school meals. This was viewed as the most important issue in both primary and post primary schools.

Parental support was identified as being the main requirement for overcoming the barrier of children's reluctance to eat new foods (32%), especially in the primary sector, whereas increased pupil education in the classroom around healthy eating (27%) was thought to be especially important in post primary schools.

Kitchen staff were also asked how easy or difficult it would be to implement specific standards in schools. The standard that caused most concern was serving high fat or fried food just twice a week, with 62% of post primary schools thinking this would be difficult.

No differences were noted between primary and post primary schools for most standards except that, when asked how difficult or easy it would be to provide milk to drink every day, fewer primary schools (52%) reported it as easy compared to post primary schools (68%). More post primary schools (35%) compared to primary schools (29%) thought it would be difficult or very difficult to implement the standard of not serving a main course in batter or containing pastry when chips or other fried potatoes are served.

While over a half (52%) of primary schools thought the standards would not affect their pupils, only a

quarter (25%) of post primary schools thought the standards would have no effect on their pupils. Indeed 36% of post primary schools reported they thought pupils would react by going to an alternative food outlet or bringing in a packed lunch (15%).

Similarly, 59% of post primary schools thought introducing the standards would result in fewer customers, more than twice as many as among primary schools (28%).

Staff were also asked to rate the difficulty of implementing standards in a number of areas. Nursery school and nursery unit lunches were thought to be the easiest areas in which to implement the standards, followed by primary school lunches and then secondary school lunches.

With regard to specific training requirements, nearly half (49%) felt that training in marketing and promotion of food would be required, and a further 38% felt that training in nutrition would be useful. Catering for ethnic and special diets were training needs highlighted by 33% and 32% of respondents respectively. And 30% specified menu planning as another area where they would benefit from further training. Only 8% felt that they did not require any further training to help them implement the standards effectively.

Overall, 77% of respondents stated that they were either quite or very prepared for the implementation of the standards. A larger proportion of primary schools (82%) than post primary schools (72%) said they were prepared. The majority of staff thought that the information they had received about the standards was good, but for those who thought it was poor (9%), around half asked for more concise information and just over a quarter asked for face-to-face briefing meetings.

## Further development

After consulting on the proposed compulsory nutritional standards, the Department of Education decided to pilot the standards in a sample of schools. This would identify any difficulties that may be encountered during implementation and would help to inform the subsequent implementation of the standards in all schools. Just over 100 schools, representing the nursery, primary and post primary sectors, will be involved in the pilot, which begins

on 22 March 2004 and will last for one academic year.

The results of the training needs assessment clearly highlight the need to provide training for school meals staff in order to assist them to implement the standards. Kitchen unit supervisors from all schools involved in the pilot have participated in a comprehensive training programme, which is in two parts:

- a foundation certificate in nutrition, accredited by the Royal Society for the Promotion of Health;
- a workshop covering a range of practical issues, including menu planning, portion sizes and food presentation.

The pilot implementation of the standards will be evaluated using both qualitative and quantitative methodologies.

# Review of physical activity campaign research, 1999 to 2002

The HPA commissioned research to collate information on physical activity at both community and regional levels to evaluate the successes and failures of a variety of physical activity initiatives. The information will be used to inform the development of a new three year public information campaign strategy.

## Aims

The key aim was:

- to review local existing physical activity reports including evaluations of the Get Active in the Community Awards scheme and the previous three years' HPA public information campaigns.

## Main objectives

These were:

- to assess changes in physical activity levels and campaign based beliefs and knowledge by age, sex and social class, making recommendations for areas that are proving a success or are failing;
- to review the first three years of the community grants scheme and make recommendations for its future success.

## Community Awards scheme

### Objectives

These were:

- to help people overcome the barriers to being physically active including
  - no one to exercise with;
  - lack of access to facilities;
  - lack of confidence;
  - lack of willpower.
- to raise awareness of local leisure facilities and physical activity opportunities;
- to provide opportunities for acquiring new skills through participation in physical activity;
- to encourage cross-community participation, where appropriate.

### Key findings

The scheme has now been running successfully for three years, offering grants of up to £250 in 1999 and 2000, and up to £500 in 2001. The success of the scheme has also meant that the timescale in

which projects are able to take place has expanded from the initial pilot period of July and August to any time between May and October.

### Participation

The number of grants awarded to community schemes increased from 79 in 1999 to 97 in 2000, and rose again in 2001 to 135. Likewise, the number of participants involved in the schemes rose from just over 3,500 in 1999 to 4,000 in 2000 with a final jump to nearly 7,000 in 2001. Over the three years of the project the scheme had mainly attracted the over 50s (35%, 37% and 47% in 1999, 2000 and 2001 respectively), and school children (37%, 36% and 37%).

### Choice of activity

Over the three years of the study, walking was consistently the most popular activity. This is to be expected, given the priority accorded to this activity by the grant awarding body in line with the HPA campaign promotion strategy; however, in the 2001 campaign, dancing was another key activity (28%) which substantially gained popularity. In 2001 the majority of activities took place once a week (70%), a substantial increase on 2000 (46%) and 1999 (47%), while the amount of activities taking place on a daily basis more than doubled in 2001 (14%) compared to 2000 (5%) and 1999 (4%).

### Meeting project objectives

Over the three years, the majority of projects considered they had helped individuals overcome the barriers to physical activity. Although 95% of projects had reported increased awareness of local leisure facilities in 2000, this figure dropped to 87% in 2001. However, when asked whether participants had acquired new skills, there was a dramatic increase from 57% in 1999 to 77% in 2000 and up to 93% in 2001. Similarly, awareness of health benefits increased from 73% in 1999 to 95% in 2000, and stabilised at this high level for 2001 (93%).

### Future development of scheme

The community awards scheme has met its aims and objectives over the past three years and has

facilitated a significant expansion of new physical activity groups within the community. To encourage more participation from a wider range of individuals including 17-49 year olds and those from minority ethnic groups, the grant awarding body should relax its criteria on supporting mainly walking and cycling activities, and encompass other activities.

The grant awarding body should also consider making the '30 minutes a day on most days of the week' message a criteria for the scheme in line with campaign messages, to increase the percentage of the population carrying out the recommended amount of physical activity per week. This would also help to synchronise community and regional activities.

## Campaign evaluations

The HPA ran three public information campaigns to promote physical activity in Northern Ireland in June 1999, June 2000 and finally in August 2001. The overall aim of the campaigns was "to provide the general public with positive and motivational messages about the health benefits that can be obtained from becoming more physically active".

### Objectives of the campaigns

These were:

- to increase knowledge about what constitutes physical activity and how it differs from being generally 'active';
- to raise awareness of the health benefits of regular moderate physical activity among the target population (40-60 year olds);
- to encourage a positive attitude towards physical activity among the target population;
- to increase levels of participation in physical activity, particularly walking and cycling, among the target population.

### Target group

The primary target group for the campaigns was men and women between the ages of 40 and 60. The secondary target group was the Northern Ireland population as a whole (aged 16 or over).

### Key findings

After the first campaign 14% of adults reported their level of physical activity had increased; however, this nearly doubled to 23% in 2000 and stabilised at a similar figure of 24% in 2001. When individuals were asked if they had increased their physical activity, walking or cycling in the past four weeks, a

32% increase was observed for the target group, compared to 26% in the general population over the period 2000-2001.

### Age

Trends in the data show a significant increase in short walks (a major focus of the campaign) from 2000-2001, in all age groups except the over 60s, with an increase for the primary target group of 38% between 2000 and 2001. Increases were also observed in those taking brisk walks and those walking one to two miles or more between 1999 and 2000; however, at the 2001 campaign there was a small decrease in these activities in all age groups except the 16-24 year olds.

### Gender

Evaluation shows a discrepancy in uptake of physical activity by gender, with more females reportedly engaging in physical activity as a result of the campaigns. Overall, an 80% increase in female physical activity was noted between 1999-2001, increasing the proportion of women taking the recommended amount of physical activity from 15% to 27%, while the proportion of men rose from 13% to 20%, an increase of 54%.

### Social class

Overall between 1999 and 2001 the lower social classes were nearly twice as likely to increase their levels of physical activity (92%) compared with those in the higher social classes (47%). No relationship was observed between social class and the reported decrease in brisk walking or walking one to two miles or more which occurred between 2000 and 2001.

### Knowledge of physical activity

No discernable change in knowledge was found over the 1999-2001 campaign period in relation to the statement 'For health benefits the recommendation is 30 minutes of moderate activity on most days of the week'. In 1999, 85% of respondents agreed with the statement, dipping to 75% in 2000 and rising again to 83% in 2001.

However, in 1999, 2000 and 2001, people who were exposed to the campaign were significantly more likely to agree with this statement than those who had not been exposed. In 1999 a significantly greater proportion of the target group had agreed with this message; however, in 2000 and 2001 there was less of a discrepancy between the target

group and the general population, indicating that the knowledge of physical activity was not being limited to only one group of the population. Interestingly, around two thirds of those surveyed agreed with the statement 'For health benefits the recommendation is 45 minutes of moderate activity three times a week'.

In all three years, the majority of people agreed with the statement that 'regular moderate physical activity reduces the risk of high blood pressure'. However, agreement with this message rose significantly from 79% in 1999 to 89% in 2001. Significantly, more of the people who agreed with this statement in 2000 and 2001 had been exposed to some element of the campaign, with those in the primary target group also more likely to agree than those in the general population. Although overall, those in the higher social classes initially showed higher levels of knowledge about physical activity in comparison to those in the lower social classes, both groups showed an equal increase in knowledge over the three year period.

While those over 60 had the lowest initial knowledge about the relationship between physical activity and blood pressure, their rise in knowledge over the three years equalled that observed in other age groups in 2001, indicating they had the greatest proportional improvement in knowledge as a result of the campaign.

Encouragingly, the percentage of the population agreeing with the statement 'you need to be sporty to be physically active' decreased from 20% in 1999 and 2000 to 14% in 2001; however, agreement with this statement has been consistently high for those over 60 in the three years of the campaign. Individuals in the higher social classes and those exposed to the campaign were consistently less likely to agree with this statement than those in the lower social classes.

Overall, the proportion of people agreeing with the statement 'regular physical exercise makes you feel tired' has increased over the three years from 35% to 37% to 47%, and men were more likely to agree with this statement than women.

#### Satisfaction with activity level

In all age groups except the over 60s, individuals said they would like to do more physical activity,

with the drop in contentment about their levels of physical exercise being greatest in those in the target age group between 2000 and 2001. There was a 10% decrease in those in the higher social classes who were not content with their level of exercise between 2000 and 2001, while only a 3% decrease in levels was noted in the lower social classes; however, overall the higher social classes were least content with their levels of exercise.

#### Factors inhibiting or promoting physical activity

The main factor inhibiting physical activity was lack of time, with the percentage of people citing this reason increasing from 43% in 2000 to 53% in 2001. However, the most popular reasons people selected that would encourage them to exercise more were 'to improve my health', 'to get fit', and 'to control my weight'. The most significant rise was in people citing 'to control my weight' which increased almost 34% between 2000 and 2001. This increase was more marked in women (38%-50%) than men (21%-29%) and showed the greatest rise in the 17-39 year old age group.

#### Recommendations

Although the campaigns appear to have had an effective impact on individuals' knowledge and practice of physical activities during the campaign period 1999-2001, there was disparity among groups, with the over 60s gaining more knowledge than other age groups and females being more responsive to the uptake of physical activity than males. Overall, however, those who were exposed to the campaign had greater knowledge of physical activity and its benefits than those not exposed.

The campaign strategy of consistently promoting walking and cycling to the 40-60 age group initially showed a very positive increase in physical activity in the population overall; however, this effect appears to have stabilised in the population between 2000 and 2001 with little change being observed in overall physical activity over this period. Expansion beyond walking and cycling may therefore be required to continue to maintain a positive profile on physical activity for the coming years. Alternatively, other options that might encourage more people to take up physical activity, such as promoting using physical activity as a method of weight control, may be useful for future campaigns.

# Evaluation of the Class Moves! pilot programme

The Class Moves! programme is a new scheme for primary school children of all ages. Initially developed in the Netherlands to aid in the development of children's movement and relaxation skills, Class Moves! pilot schemes have now been successfully implemented in Scotland and Wales. In April 2002 a joint initiative funded by the Northern Ireland Physical Activity Strategy Implementation Group (NIPASIG) in conjunction with the Western Education and Library Board (WELB) led to the introduction of Class Moves! as a pilot scheme into 50 schools within the WELB.

The major outcomes of the scheme are thought to be:

- to encourage pupils to engage in different types of physical activity on a daily basis;
- to raise awareness of physical activity;
- to develop sensory-motor skills;
- to enhance pupils' posture, movement and relaxation;
- to improve pupils' concentration;
- to increase pupils' motivation;
- to develop self-care skills.

The HPA facilitated this programme and was asked to evaluate several aspects of this scheme.

## Implementing Class Moves!

It was suggested Class Moves! should be implemented in 5-10 minute daily sessions which would alternate between exertion and relaxation techniques. To provide ideas for songs and activities to carry out in these sessions, calendars complementing the scheme were provided by the original Class Moves! designers. The calendars were designed with monthly themes so children would not tire of doing the same songs or activities. Seven calendars were designed in total, one for each of the seven years of primary school. CDs of the songs were also provided as a musical accompaniment to the scheme.

## Aims of evaluation

These were:

- to review the nature and content of the Class Moves! resources;

- to assess the feasibility of the programme within the classroom setting;
- to assess the programme in relation to the school curriculum and other initiatives.

## Methodology

The research was carried out in two stages.

- *Stage 1 (November 2002): assessment of Class Moves! in action – initial thoughts*

A postal questionnaire was sent to 43 candidates participating in the scheme with 31 completed questionnaires returned (72%).

- *Stage 2 (May 2003): assessment of Class Moves! – a year on*

A second postal questionnaire was used; however, only 26 schools responded and of these, eight were no longer participating in the Class Moves! project, giving a total response rate of only 45%.

## Key findings

### Scheme implementation and general running

After only six months participating in the scheme, 25 of the 31 teachers agreed or strongly agreed that the scheme was easily applicable to the classroom, while 24 agreed it was a useful classroom tool. After one year the majority of teachers were using the scheme once or twice a week (8 out of 18), with five schools reporting using it three times a week and only one school using Class Moves! daily. Class Moves! was intended to be put into practice in the classroom with children up to P7; however, in reality it was mainly used with P1 and P2 children, although those up to P4 did participate in a number of schools.

### Attention, happiness and development skills

Teachers reported that the programme helped to get rid of restless energy and helped children settle down to work better. Indeed 9 of the 18 teachers thought the programme helped improve attention span (the remainder did not respond to this question). Overall, children enjoyed participating in the scheme, an observation reported by nearly all teachers. Some questionnaire comments included 'the exercises used were fun and enjoyable'.



'children loved the songs' and the scheme led to 'smiles all round'. Sensory and motor skills were also thought to be developed by the scheme, an effect reported by the majority of teachers. One comment by a teacher was 'it develops children's body awareness and control as well as making them more aware of emotions'.

#### Physical activity

The scheme was praised for making children more aware of their body and mind, and promoting coordination skills. Fourteen of the 18 teachers still using Class Moves! after one year thought the programme benefited the physical activity of children. Teachers' comments included 'pupils associate physical activity with fun', 'makes movement fun', and Class Moves! 'relates well to PE/music curriculum in P1/2'.

#### Teachers' views

A better classroom atmosphere was observed after the scheme was implemented by the greater majority of teachers. The scheme was thought to relax both pupils and teachers, and create a fun atmosphere in the classroom. Nearly all the teachers agreed that the scheme had suitable content, and that the activities provided in the ideas calendar were aimed at the appropriate ages. Of those teachers who responded when asked did Class Moves! meet the requirements of the curriculum, all thought that it did.

## Conclusion

The scheme was readily transferable from the version used originally in the Netherlands into the selected schools in Northern Ireland. Teachers and pupils both welcomed the programme and found Class Moves! an enjoyable and fun activity. The calendars provided to help give ideas on songs and activities were found to be relevant to the particular age groups and gave teachers new ideas to try in the classroom. The introduction of Class Moves! appeared to improve the concentration and attention span of children, as well as lead to a better classroom atmosphere. The positive reports provided by the evaluations have led the education board to review the scheme in order to assess the benefits of implementing Class Moves! throughout Northern Ireland.

## Dissemination

These results were presented to the Western Education and Library Board.

# Evaluation of the Get Active in the Community Awards scheme 2002

The Northern Ireland Physical Activity Strategy aims to increase participation in physical activity, especially among those who exercise least. One of the strategy objectives is to increase the opportunities for participation in the community. As part of a public information campaign, the 'Get Active in the Community Awards' scheme was developed by the HPA in collaboration with Disability Action and the Northern Ireland Council for Voluntary Action, and funded by the DHSSPS. The scheme offered grants, initially of up to £250 and later of up to £500, to community and voluntary groups to support projects to promote physical activity in the community. In 2001 the scheme allowed projects to take place between May and October; however in 2002 it was expanded and allowed projects to run between June and December.

The scheme had the following objectives:

- to help people overcome the main barriers to being physically active such as no one to exercise with, lack of access to facilities, lack of confidence, and lack of willpower;
- to raise awareness of local leisure facilities and physical activity opportunities;
- to provide opportunities for people to acquire new skills through participating in physical activity;
- to raise awareness of the health benefits of regular moderate physical activity;
- to encourage, where appropriate, cross-community participation.

## Aims

These were:

- to assess how the Get Active in the Community Awards scheme met its aims and objectives;
- to make recommendation for future schemes.

## Main objectives

These were to establish:

- the range of target groups, activities and numbers of participants in the different projects;
- how the award money was spent;
- how the local organiser assessed the success and outcome of their projects.

## Methodology

Questionnaires were distributed by post to the contact persons of all projects that received grants.

## Sample

Out of 151 projects awarded grants in 2002, 126 returned questionnaires, a response rate of 83%.

## Key findings

Over 9,000 people participated in the various projects. The number of people participating in the individual projects ranged from 5 to 601. More school children (37%) and people over the age of 50 (47%) participated than other age groups. This was related to the target groups of the projects.

The majority of projects were targeted at mixed gender groups (80%) with a number of projects targeting women only (14%), and just eight projects targeting men only (6%).

Forty one percent of the projects had walking as the main activity, 28% dancing and 6% aerobics. The rest focused on a range of activities including keep fit, cycling and swimming or a mix of different forms of activity.

The majority of projects were new initiatives (72%), suggesting that the scheme allowed community groups to embark on new ventures that might not otherwise have been possible. A range of imaginative projects was developed specifically to demonstrate how to overcome the perceived barriers to physical activity. For example, one of the common barriers to participation is that many people feel lack of confidence. Organisers reported that their projects had gently eased people back into exercise at a pace that suited them and helped to overcome individual inhibitions and lack of confidence.

Virtually all the respondents (98%) reported that their projects led to an increased awareness of the health benefits of physical activity. For example, some projects reported that their participants now realised they were unfit and wanted to participate in



other forms of physical activity, whereas other projects had brought in speakers to give talks on health issues. Increased awareness of the local facilities was also reported by 87% of the respondents, with more awareness and use of cycle tracks being reported as a result of the projects. Nearly half of respondents reported that a new group had been established as a result of their activities including an active playground committee, a keep fit club and a hill walking and orienteering club.

Three quarters of respondents reported that their project had enabled participants to learn new skills. For example, a walking group learned the history of a variety of places and how to identify different flowers; others learnt new dances and alternative ways of keeping fit. Other skills, not directly related to physical activity such as group skills, leadership skills and the organisation of events, were also acquired.

## Recommendations

Respondents were asked to give their recommendations on how to improve the scheme

for the future. These were to:

- extend the timescale of the scheme;
- increase the actual size of the individual awards;
- provide access to a pool of trained instructors/leaders;
- provide more transport facilities;
- promote the scheme more widely;
- provide participants with certificates etc to further encourage them;
- provide health information related to the project;
- improve the administration by simplifying application, evaluation procedures;
- provide partial funding for the continuation of successful schemes.

## Dissemination

A report on this evaluation was presented to the Northern Ireland Physical Activity Strategy Implementation Group in March 2003.

# Research to support the Antimicrobial Resistance Action Plan (AMRAP)

The HPA commissioned research that would inform the development of a public information campaign aimed at reducing expectation for and usage of antibiotics among the general public.

## Aims

These were:

- to examine the knowledge, attitudes and behaviour of the general public in Northern Ireland towards antibiotics and antimicrobial resistance;
- to examine the current attitudes to antibiotic prescribing among general practitioners (GPs) and to identify the need for strategies or information to support practitioners in reducing prescribing for antibiotics.

## Methodology

To meet the aims of the study, two quantitative surveys were designed: a telephone survey of the general public and a postal survey of general practitioners. Initial qualitative work with GPs informed the development of both questionnaires.

## Sample

### Survey of general public

A telephone survey of a random sample of the public (ie adults aged 16+ years) was carried out to assess their attitudes, knowledge and behaviour towards antibiotics. The response rate to the study was 69% and resulted in a sample of 1,000 adults.

### Survey of GPs

A postal survey of a random sample of 400 GPs (ie 100 per Board area) was carried out to assess professional behaviour and experience of antibiotic prescribing. The response rate to this survey was 53% with an achieved sample of 211 GPs.

The fieldwork for both surveys was carried out during February and March 2003. In terms of representing the population profile, the sample of the public was over representative of females (the sample had 66% women compared to 52% in the population).

## Objectives

### Public survey

To assess:

- recent usage and frequency of usage of antibiotics;
- current knowledge and health beliefs of the effectiveness of antibiotics and awareness of antimicrobial resistance;
- expectation with regard to obtaining antibiotics;
- reaction to previous or future refusal to requests for antibiotics and to GP advice in general;
- reactions to a campaign to discourage use of antibiotics;
- what the general public consider to be the most effective format for delivery of information on antimicrobial resistance.

### General practitioners' survey

To assess:

- knowledge, behaviour and attitudes to prescribing antibiotics and the issue of antimicrobial resistance;
- whether GPs are currently using or have tried any strategies to help reduce expectation, what these were/are and their perceived effectiveness;
- perceived expectation from patients and real or perceived reaction of patients to refusal;
- opportunities and willingness to deny patients antibiotics or to advise patients to delay usage;
- the level of support for an information campaign;
- GPs information and training needs in discouraging expectation and usage of antibiotics among patients.

## Key findings of public survey

Forty percent of respondents had been prescribed antibiotics in the 12 months prior to the survey. Those reporting the highest usage were 16-24 year olds (53%) and those entitled to free prescriptions (50%).

Respondents were asked to describe the condition for which they had received an antibiotic and from this it was estimated that 42% of the prescribing had been appropriate.

The vast majority (92%) of the sample had personally spoken to the health professional prescribing antibiotics for them, with 93% of these consultations performed face-to-face and 7% over the phone.

In 87% of cases, respondents identified that the health professional had suggested they take an antibiotic. When asked if they had ever requested an antibiotic from a health professional, 28% of respondents reported they had; however 19% of these requests had been refused. When the reason for refusal was explained, 85% of respondents report being satisfied with the explanation provided.

Just over three quarters (78%) of respondents reported they always finish a course of prescribed antibiotics, with a further 13% reporting to usually finish the course. Those under 25 (55%), men (73%), those in the lower social classes (74%), and those who pay for their prescriptions were least likely to say they would always finish a course of antibiotics.

Nearly a third (32%) stated that their GP had discussed alternatives to antibiotics, with this being most common in the 25-39 age group (36%) and least common in those over 65 (24%). Eighty three percent reported they would consider delaying antibiotics to see if the condition cleared up. Younger people (74%), older people (79%), men (78%), and those in the lower social classes (79%) were least likely to report delaying taking antibiotics.

The most common condition that people would expect an antibiotic for would be earache (43%), followed by a bad sore throat (31%), flu (27%) and fever/high temperature (27%). A bad cough (17%) and a bad cold (10%) were the conditions for which people would least expect to receive an antibiotic.

Of all the age groups, 16-24 year olds would be most likely to expect antibiotics for most conditions. However, males were more likely than females to expect an antibiotic for all conditions except earache, and those in the manual professions were more likely to expect antibiotics than their non-manual counterparts. Those who received free prescriptions were also more likely to expect an antibiotic than those who pay.

Overall, knowledge of antibiotics was limited in certain groups including the under 25s, those over 65, males, and those working in the manual sector. When asked if they agreed or disagreed with a number of statements, 89% of respondents agreed with the statement 'the more antibiotics that are prescribed, the less they work in the long term'; however, the lowest level of agreement with this statement was observed in the under 25s (82%), men (86% compared with 92% for women) and those in the lower social classes (86% compared with 92% for the higher classes).

When asked to respond to the statement 'antibiotics do not work on most colds, coughs and sore throats', again the lowest level of agreement was with the under 25s (55%), men (67% compared with 82% for women) and the lower social classes (71% compared with 80% for the higher classes).

The majority (90%) of respondents were supportive of a public information campaign to increase awareness of the health conditions which require antibiotics, with the most popular option being a television advertising campaign (58%).

### Key findings from the GP survey

Over half (57%) of GPs thought patient usage of antibiotics had decreased, 45% reported demand for antibiotics had also decreased in the last five years, and 61% reported better public understanding of antibiotics.

Around a third (34%) of GPs reported that reducing antibiotic prescribing was a major priority; however, despite this only 20% of GPs had a formal policy and 19% had a written policy in regard to this issue.

All the GPs surveyed reported receiving telephone requests for antibiotics, with 25% of all antibiotic prescribing being done over the phone. Eighty six percent of GPs stated that they sometimes fulfil telephone requests for antibiotics qualified by taking a medical history of the patient.

Almost all GPs (95%) were found to have tried at least one alternative to antibiotic prescribing. The most popular methods were delayed prescribing (95%) and discussion with patients (99%). Both these methods had received a positive patient reaction (78% and 89%).

Eighty five percent of GPs reported receiving requests for antibiotics on a daily basis. Demand for antibiotics was reported to be highest among mothers with young children (48%), with those over 55 also expecting antibiotics (18%). The majority (60%) of GPs found it difficult or very difficult to persuade patients that an antibiotic may be inappropriate and 74% of GPs reported patients going to another GP after their refusal to prescribe an antibiotic.

When asked how best to discourage demand for antibiotics, the majority of GPs (95%) supported the idea of a public information campaign to increase public awareness. This was also thought to be the most effective strategy in aiding GPs to reduce the level of antibiotics prescribed (78%).

The key messages that GPs felt should be conveyed in a public information campaign were that colds, coughs and flu etc do not need antibiotics (48%). A further 16% suggested 'antibiotics are too precise to prescribe ineffectively/losing their effectiveness' and another 16% suggested 'antibiotics can have severe side effects'.

## Recommendations

There was a high level of support from the public and from GPs for a public information campaign regarding the appropriate use of antibiotics. This research highlights a need to target especially the following groups: young people aged 16 to 24 and the older age group of over 65 years, men, parents of young children and those from a manual social class grouping.

## Dissemination

This research was presented to the AMRAP implementation steering group in June 2003 and a public information campaign is now in development.





**Health**  
Promotion  
Agency



Health Promotion Agency for Northern Ireland  
18 Ormeau Avenue, Belfast BT2 8HS.  
Tel: 028 9031 1611 (Voice/Minicom). Fax: 028 9031 1711.  
[www.healthpromotionagency.org.uk](http://www.healthpromotionagency.org.uk)