A review of the health promotion framework for action nutrition plan

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A REVIEW OF THE HEALTH PROMOTION FRAMEWORK FOR ACTION NUTRITION PLAN

THE NATIONAL NUTRITION SURVEILLANCE CENTRE,
NATIONAL UNIVERSITY OF IRELAND, GALWAY.

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A REVIEW OF THE HEALTH PROMOTION FRAMEWORK
FOR ACTION NUTRITION PLAN

PREPARED FOR THE HEALTH PROMOTION UNIT,
DEPARTMENT OF HEALTH

BY

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Chapter One

Introduction and Background to the Framework

The Health Promotion Unit of the Department of Health’s Nutrition Promotion Framework for Action represented a five year plan for nutrition health promotion activities and was launched in 1991 by the Minister for Health, Dr. Rory O’Hanlon. The initiative was broad ranging, employing a settings based approach; in the community generally, in schools, industry/workplace, health care facilities and in association with the food industry and other organisations. The basis of the public health message was the existing healthy eating guidelines, which were qualitative in nature but also incorporated a number of specific quantifiable targets in relation to dietary components.

During the past five years there have been a range of developments germane to public health, health promotion and nutrition. The establishment of the National Nutrition Surveillance Centre was one of those initiatives, and in 1996 we were asked to undertake a review of the Framework activities in the light of these events and to make suggestions for likely future directions of public health nutrition policy in the context of our nutrition surveillance information. The present report represents the outcome of that review. This is not an evaluation of the Framework for Action but a summary of the work undertaken and recommendations for the future. No specific summative or formative evaluation was planned though, as shall be seen, specific initiatives were the subject of evaluation throughout the lifetime of the Framework and these we report here.

The Framework was primarily the brainchild of the Health Promotion Unit, spearheaded by the consultant dietitian to the Department of Health. The rationale for such a framework was informed by a range of sources, which included the following:

1. In many European countries national food and nutrition policies were being proposed which recognise that the major chronic diseases have a preventable component and that a healthy diet is a key determinant of long term health and well-being. Key elements of those policies are more recently reviewed in the Nutrition Advisory Group’s (NAG) report to the minister (Nutrition Advisory Report 1995).
2. The state of knowledge of nutritional science permitted in principle guidelines on diet and nutrition for the general public which could be acted upon without clinical intervention being necessary.

3. Public policy generally was becoming more health promoting in orientation, less reactive and sickness oriented and the capacity of individuals to play a role in determining their own health and well-being was being recognised. This too was reviewed more recently in both *The Health Strategy: Shaping a Healthier Future (DOH 1994)* and *The Health Promotion Strategy: Making the Healthier Choice the Easier Choice (DOH 1995).*

4. The health promotion movement had moved away from the simple information dissemination approach to one which recognised that motivated individuals should be facilitated to achieve lifestyle change in practical and manageable ways on a day to day basis, the so-called settings approach.

The Framework document was constructed in this spirit and a detailed operational plan was developed. Classically, assessment of the effectiveness of any strategy would be based on measures of achieved outcome; were priorities set based on evidence and was it possible to measure the impact of their achievement? This can be difficult to assess in a complex area like diet. Furthermore, it is often hard to establish the relative contribution of different sectors. This is beyond the scope of a retrospective review of this kind but we can examine what the successes and failures were from a process and impact perspective and comment on the appropriateness of the structures presently in place.

The objectives of this review were three-fold:

1. To audit as fully as possible activities undertaken at national, regional and local level under the auspices of the Framework document and where available to comment on the findings of any process, impact or outcome evaluation.
2. To review available surveillance data pertaining to the healthy eating guidelines.
3. To assess and comment upon these findings in the light of wider on-going policy issues.
BACKGROUND TO THE FRAMEWORK

Following the international conference on primary health care in Alma Ata, Russia in 1978, the European Office of the World Health Organisation produced a list of targets entitled Health for All by the Year 2000 which its member countries were to pursue (WHO 1985). The three essentials of Health for All were 1) the promotion and facilitation of healthy lifestyles, 2) a reduction in the burden of preventable ill-health and 3) a re-orientation of health care systems. Of the 38 targets set by the WHO, those which can be directed partly towards nutrition are, that by the year 2000 life expectancy at birth should be at least 75 years and that premature mortality from diseases of the circulatory system and cancer should be reduced by at least 15%.

This Health For All by the Year 2000 strategy has brought about the reorientation of health policies towards disease prevention, health promotion and the creation of a supportive environment in which people can accept a greater degree of responsibility for their own health. During the discussions concerning development of food and nutrition policies in Europe in 1990 (WHO 1990) key elements evolved which were felt to be necessary for success. A multi-sectoral approach, concentration on some essential issues, and concentration on one person, the consumer, were all priority considerations and could all be addressed with a concise policy statement, clear objectives and actions.

In Ireland recognition of the importance of nutrition and its role in attaining the targets set out by the WHO was first documented in Health: the Wider Dimensions (Department of Health 1986). The Health Promotion Unit of the Department of Health in 1991 devised the specifically nutritional Framework for Action (HPU 1991). Mortality statistics for 1989 showed that 47% of all deaths were due to diseases of the heart and circulatory system and 23% were due to cancers. Overweight and obesity are known risk factors for hypertension, hyperlipidemia, diabetes and result in increased risk of cardiovascular disease. The Framework document stated that better health of the nation could only be achieved by health promotion and prevention of ill-health and that nutrition should be an integral part of this. Subsequently the government’s health strategy Shaping a Healthier Future (1994), a four year action plan, identifies health promotion and disease prevention as an important contributor to improving health status and quality of life and recognises diet and nutrition as one of the modifiable risk factors for two of the three main causes of premature mortality in Ireland, cardiovascular disease and cancers. Following on from the recognition by the Health Strategy of the need for health promotion at a national level, a Health Promotion Strategy was developed in 1995 (DOH 1995). This policy reinforced the need to reduce levels of perceived illness, reduce the incidence of disease and enhance the levels of perceived health and well being. It outlined nutrition related goals to help achieve this, putting the previously devised healthy eating guidelines in the context of health promotion. These focused on the maintenance of a healthy weight through the consumption of a wide variety of foods and regular exercise, a reduction in total fat and a reduction in the percentage of people who are obese. The reduction in the number of people exceeding the recommended sensible limit of alcohol consumption was also addressed.
The five year plan of the Framework for Action aimed to improve eating habits in line with Healthy Eating Guidelines, and in particular to achieve a varied diet and appropriate body weight. The Healthy Eating Guidelines, devised by the Food Advisory Committee (FAC) for the Department of Health in 1987, were based on scientific reports and publications from Ireland and other countries and recognised the need to update the guidelines once sufficient population nutrient intake data were again available. The nutrition programme followed in the Department of Health at the start of the Framework's lifetime focused on the guidelines of the FAC but in latter years, 1995 and 1996, concentrated on the more qualitative guidelines formulated by the Nutrition Advisory Group (NAG).

The quantitative guidelines for the general population, reproduced in the Framework were:

- The diet should be varied to include essential nutrients in amounts recommended
- The diet should provide energy consistent with the maintenance of body weight within the recommended range
- The diet should include no more than 35% of energy as fat
- The diet should include 25-35g fibre per day
- The diet should include some vegetable protein as well as animal protein
- The diet should include no more than 10g salt per day
- The frequency of consumption of sugary foods in the Irish diet should be reduced, especially by children
- The quantity of alcohol intake in the Irish diet should be moderate

The NAG recommended guidelines were:

- Eat a wide variety of foods
- Balance energy intake with physical activity levels
- Eat plenty of fruit and vegetables. Aim to eat at least four servings every day.
- Starchy foods such as bread and cereals should be eaten daily
- Frequent consumption throughout the day of foods containing sugar should be avoided, especially by children
- Total fat intake should be reduced, with emphasis on reducing saturated fats

The recommended guidelines were further developed into consumer friendly healthy eating guidelines as follows:

- Eat a variety of different foods using the Food Pyramid as a guide
- Eat the right amount of food to be a healthy weight and exercise regularly
- Eat four or more portions of fruit and vegetables every day
- Eat more foods rich in starch - bread, cereals, potatoes, pasta and rice
- Eat more foods rich in fibre - bread and cereals (especially wholegrain), potatoes, fruit and vegetables
- Eat less fat, especially saturated fats. Make lower fat choices whenever possible
- If you drink or eat snacks containing sugar, limit the number of times you take them throughout the day
- Use a variety of seasonings - try not to rely on salt to flavour foods
- If you drink alcohol, drink sensibly and preferably with meals

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DATA SOURCES ON NUTRITION

Baseline data for the five year action plan were obtained primarily from the first Irish national nutrition survey for forty years which was carried out in 1989/90 by the Irish Nutrition and Dietetic Institute. This found that 63% males and 48% females were overweight and that almost three quarters of the women and 60% of men had fat intakes which contributed more than the recommended 35% of their total energy intake. Fibre intake for the adult population was found to be 19g/day which is below the recommended levels and relatively low intakes of iron were found in women. Similarly the Kilkenny Health Project, a health intervention programme carried out between 1985 and 1990, found the percentage of energy derived from fat to be 39% for men and 40% for women and in both the reference and intervention group there were high levels of overweight/obesity. From these data it was confirmed that action was necessary to help improve the Irish diet and bring it into line with the recommended consumption levels. The first NNSC report (1993) summaries all available information on nutrition status in this country at the time. That report reviewed comprehensively dietary patterns in Ireland over the last century and its relation to various population sub groups.

The Framework for Action followed on from the consultative statement on healthy policy, Health the Wider Dimension (1986), which recognised that for health programmes concerned with lifestyles, influences beyond the individuals control must be dealt with, through the use of a broad multictectoral approach.

The main objective of the Framework was to improve the nutritional status of the Irish population in order to help reduce the incidence of diet related diseases. It was intended to do this using targeted areas which incorporated the multi-sectoral approach necessary for health promotion as advocated in the 1986 document. To do this specific target audiences were identified, including the community, schools, workplace, health care population sub-groups and food industry. Networking with other health organisations was also recognised as playing a crucial role in the achievement of targets. Actions were set which would provide nutrition education and promote healthy eating whilst at the same time recognizing barriers to healthy eating such as income, culture and limited availability of healthy foods.

In 1995 recommendations from the Nutrition Advisory group were made for the development of a food and nutrition policy (NAG 1995). It included strategies to influence contributors in the whole of the food chain, from food production and processing, to distribution, retailing and catering so as to facilitate the consumption of nutritious food by the Irish population.
REVIEW METHODOLOGY

The Framework was reviewed in the context of:

1. ACTIONS UNDERTAKEN SINCE THE FRAMEWORK WAS INITIATED.

A systematic review of actions carried out in different settings was performed by:

1.1 Review of the Health Promotion Unit activities
The role of the Health Promotion Unit and the nutrition related activities undertaken were described in consultation with the consultant dietitian to the HPU.

1.2 One to One Interviews
Interviews were carried out with key personnel from various food and health organisations, retail organisations, and those in the eight health boards known to be involved with or have responsibility for nutrition related health promotion activities. Preliminary letters were sent to the people involved, explaining the nature of the interview, and informing them of the approximate date. Follow up telephone calls arranged the date and time of interview which were designed to last approximately one hour.

A structured interview was conducted with representatives from the above agencies, and information obtained on views of the Framework document and activities carried out over the 5 years in the following settings: Community, Schools, Industry/Workplace, Health Care Facilities, Population Subgroups, Food Industry and Networking with other organisations. Information was also obtained on future actions planned in the organisation and their recommendations for future policy.

1.3 Postal Surveys
As a supplement to the one-one interviews, two postal questionnaire surveys were carried out to identify the more day-to-day elements of nutrition health promoting activities ongoing in Ireland. From a list of relevant personnel in each health board, a random sample of superintendent/public health nurses and a representative of community care was selected. In addition a random selection, proportionately stratified by region, of organisations participating in the Irish Heart Foundation/Health Promotion Unit initiative, Happy Heart Eat Out programme or registered for the Happy Heart at Work Healthy Eating Module were also surveyed. There were various categories of companies in these groupings ranging from public sector, private industry and health sector groups.

The questionnaire was designed with 15 questions, 12 of which were closed, the remaining three requiring some comment. It was intended to obtain information on the setting(s), population subgroups, awareness of National Healthy Eating Week, type of nutrition related activities, training courses attended, extent of networking, attitudes to nutrition and further nutrition information required.
Chapter one: Introduction and Background to the Framework

1.4 Audit of Evaluation of Activities already carried out
A number of evaluation reports had been carried out by or on behalf of the Health Promotion Unit on various activities during the 5 year period and were also reviewed.

2. Data available to the National Nutrition Surveillance Centre
A review of the data available in the National Nutrition Surveillance Centre was performed which looked at the trends in diet and related diseases under the headings of the various healthy eating week themes. It was compiled particularly in relation to the healthy eating guidelines. A variety of sources such as National and International health statistics, availability and consumption data, scientific literature and reports were utilised to compile this section.

3. Review of reports and policy documents published since the Framework for Action
The Framework for Action document is described and discussed in the context of the various health documents produced both nationally and internationally which highlight the need for nutrition related health promotion in the concluding chapter. These include the Health Strategy, Health Promotion Strategy and the Nutrition Advisory Group Recommendations for a Food and Nutrition Policy.

4. Recommendations
Utilising the results from all of the above sections recommendations were proposed for future planning and actions.
Chapter Two

Health Promotion Unit Activities

There have been many nutrition health promotion activities and programmes put in place in Ireland during the lifetime of the Framework for Action plan, co-ordinated by the Consultant Dietitian in the Health Promotion Unit. Health promotion strategies have included Mass Communication e.g., National Healthy Eating Week; Health and Nutrition Education (to the public as well as to a variety of professional groups); Community Organisation (involving the community in the identification and reinforcement of aspects of community life which are conducive to health); Advocacy (e.g., concerns about the effect of low income on food intakes and nutritional status); and Policy (e.g., production of recommendations for a nutrition health promotion document).

Many of the activities of the Health Promotion Unit have been at the macro level but have also included micro initiatives such as Food and Health, a peer-led community initiative in Blanchardstown, Dublin and the Happy Heart Programme which is an example of community action. The realisation of the importance of nutrition education to all health professionals has led to the development by the H.P.U. of programmes and materials for Public Health Nurses and G.P.s. This approach of "training the trainers" is essential to the dissemination of consistent healthy eating advice to the public. As well as specific activities reported in this chapter, others include:

- networking with various organisations e.g. health boards, food agencies, voluntary health organisations, professional bodies
- production of nutrition resources including leaflets, posters and books
- provision of an advisory service on all aspects of nutrition.

Evaluation is an integral part of health promotion programmes. Measures of the Framework For Action's success have been carried out through the various evaluations which are reported in this chapter. While some outcome evaluations were carried out during the lifetime of the Framework, most of the measures have been process evaluations which are useful in allowing new programmes to profit from earlier successes and failures.
REVIEW OF HEALTH PROMOTION UNIT ACTIVITIES

The following is a synopsis of our review, reported according to the settings categories as laid out in the Framework document.

Table 1: Summary of Specific Programmes co-ordinated by the Health Promotion Unit

<table>
<thead>
<tr>
<th>SETTING</th>
<th>ACTIVITY</th>
<th>TYPE OF EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNITY</td>
<td>National Healthy Ageing Campaign 1996</td>
<td>Process &amp; Impact</td>
</tr>
<tr>
<td></td>
<td>National Healthy Eating Week 1993-95</td>
<td>Process &amp; Impact 94/95</td>
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<tr>
<td></td>
<td>Community Nutrition Service</td>
<td>Process</td>
</tr>
<tr>
<td></td>
<td>Community Nutrition Networking Group</td>
<td>Process</td>
</tr>
<tr>
<td></td>
<td>National Ploughing Championships Stand</td>
<td>Process</td>
</tr>
<tr>
<td></td>
<td>Health Professionals - Public Health</td>
<td>Process and Outcome</td>
</tr>
<tr>
<td></td>
<td>Nurses Association</td>
<td>Process and Impact</td>
</tr>
<tr>
<td></td>
<td>Happy Heart Programme</td>
<td></td>
</tr>
<tr>
<td>SCHOOLS</td>
<td>Nutrition Education at Primary Schools</td>
<td>Process and Outcome</td>
</tr>
<tr>
<td></td>
<td>School Lunch Information Distribution</td>
<td></td>
</tr>
<tr>
<td>INDUSTRY/WORKPLACE</td>
<td>Happy Heart at Work 1993-96</td>
<td>Process &amp; Impact</td>
</tr>
<tr>
<td></td>
<td>Catering Assessment &amp; Certification</td>
<td></td>
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<tr>
<td></td>
<td>Happy Heart at Work NHBC materials</td>
<td></td>
</tr>
<tr>
<td>HEALTHCARE FACILITIES</td>
<td>Happy Heart at Work 1993-96 (some hospitals)</td>
<td>Process &amp; Impact</td>
</tr>
<tr>
<td></td>
<td>Healthy Catering Project</td>
<td>Ongoing</td>
</tr>
<tr>
<td>POPULATION SUBGROUPS</td>
<td>Food and Health Project</td>
<td>Process &amp; Outcome</td>
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<td></td>
<td>Low Income Nutrition Project</td>
<td>Process</td>
</tr>
<tr>
<td></td>
<td>Nutrition Information Campaign for Elderly</td>
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<td></td>
<td>Infants and Young Children Nutrition</td>
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<td></td>
<td>Education Materials</td>
<td></td>
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<tr>
<td>FOOD INDUSTRY</td>
<td>Restaurants and Hotel Healthy Eating Campaign</td>
<td>Process &amp; Impact</td>
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<tr>
<td></td>
<td>Happy Heart Eat Out 1994-96</td>
<td>Process &amp; Impact</td>
</tr>
<tr>
<td></td>
<td>Healthy Food Choices Award Scheme</td>
<td></td>
</tr>
<tr>
<td>NETWORKING</td>
<td>Joint Nutrition Education Projects with Irish Heart Foundation, Irish Cancer Society and Irish Hyperlipidaemia Association</td>
<td>Process &amp; Impact</td>
</tr>
<tr>
<td></td>
<td>Nutrition Education Materials to professional groups - IND, ICBF, ICN, IPA, IDHF, ATHE</td>
<td>Process &amp; Impact</td>
</tr>
<tr>
<td></td>
<td>Networking with the Irish Countrywomen’s Association</td>
<td>Process &amp; Impact</td>
</tr>
<tr>
<td></td>
<td>Media nutrition briefings and conferences</td>
<td>Process</td>
</tr>
</tbody>
</table>
COMMUNITY INTERVENTIONS

1. A. National Healthy Eating Weeks/Campaigns

Given the overall aim of the Framework for Action to improve the eating habits of the Irish population in line with the Healthy Eating Guidelines, a specific guideline has been chosen each year as a Healthy Eating theme. In recent years the National Healthy Eating Week (NHEW) has been expanded into a year long National Healthy Eating Campaign (NHEC). It is launched with a strong media and community focus during the National Healthy Eating Week and followed by a seasonal emphasis making it a year long campaign.

The main focus of the Health Promotion Unit has been the annual National Healthy Eating Week Campaigns. Since the Framework for Action was instigated there have been four National Healthy Eating Weeks, the objectives being to promote an awareness of healthy eating guidelines amongst the general public and to involve all the key players along the food chain such as food producers, retailers, food agencies, and also the media who directly influence what we eat; and to emphasise a specific nutritional theme each year. It may be argued that by having a campaign lasting for only a week that people may improve eating habits just for that week, and then return to past habits when the campaign ends. For this reason the 1996 week was expanded into a year long campaign with the rationale that this provides more flexibility, better use of resources, more opportunity to promote the theme, reinforcement of a nutritional message, and longer lasting resource materials. To provide ongoing continuity with past and future campaigns the Food Pyramid remained the cornerstone of the promotion, with the fruit and vegetable shelf of the Food Pyramid being strongly promoted.

THEMES FOR NATIONAL HEALTHY EATING WEEKS/CAMPAIGNS

1993 - Eat a wide variety of food in the correct amounts
1994 - Be a healthy weight
1995 - Eat more breads, cereals and potatoes
1996 - Eat more fruit and vegetables

The main media and community focus of the annual NHEC is still during National Healthy Eating Week when the campaign is launched. This approach makes it possible to enlist the support of liaison officers in each of the Health Boards to plan and implement a local week long intensive activity campaign. It also ensures the support of a wide range of health professionals and other educators for one week’s activity. These include dietitians, public health nurses, home economics teachers, physical education teachers and a wide range of media personnel (O’Dwyer 1997). Meetings are also held with representatives from the food industry prior to NHEW so that joint projects may be initiated and a co-ordinated and informed approach may exist.

A healthy food magazine with healthy eating recipes was introduced as part of the campaign in 1994, 1995 and 1996 and feedback from health boards has indicated
that it has contributed to the success of National Healthy Eating Week in Campaign 1995 and 1996. Part of the magazine produced for 1996 had a section devoted to ‘How to read food labels’. The issue of comprehensive food labelling is an important one, also education of the public on how to understand the information presented on a label. Other support materials include wooden mobile Food Pyramids, National Healthy Eating Week street banners, balloons, posters, stickers and logos for media campaigns.

In order to gain access to as wide a consumer group as possible, a number of bodies and organisations play a key role. These include health boards, health professionals, media, retail trade, national food agencies, government personnel, teachers and other educators, voluntary health agencies, workplaces, industrial catering contractors, restaurants and their associations, food writers guild and organisations such as the Irish Countrywomen’s Association.

In addition to process evaluations being carried out by the Health Promotion Unit with the health boards, external evaluations were carried out for the Department of Health for the 1995 and 1996 campaigns. The Market Research Bureau of Ireland (MRBI) interviewed 400 female shoppers aged between 20 and 49 years on the 1995 campaign, entitled “Eat More Bread, Cereals and Potatoes”. Sixty percent of respondents were aware of the campaign which had greatest impact on middle class, middle aged shoppers. The encouragement to eat more bread, potatoes and cereals was important, helping to counteract the myth, particularly among women, that such foods were fattening. This campaign complemented the 1994 theme “Be a healthy weight”. Seventeen percent of those surveyed recognised that the campaign had been promoted by the Department of Health and/or the Health Promotion Unit.

In addition to health board and MRBI evaluations, the 1995 campaign was evaluated in four ways; by means of a tear-off section on voluntary leaflets (n = 9,000), a 1% survey of all general practitioners and pharmacists and dentists who received NHDC materials, and small surveys of both participating dieticians and/or participants in the window food display competition with the Chamber of Commerce in Dublin. The materials were well received by the primary care health professionals and it appeared from the leaflet response that supermarkets were the most important dissemination point.

The 1996 campaign was evaluated by means of both pre and post campaign surveys by Landsowne Market Research in a nationally representative sample of 1,400 adults. The pre campaign survey highlighted the very low levels of fruit and vegetable consumption, over half of the population being below the recommended level of 4 or more portions of fruit and vegetables per day. The baseline survey also highlighted the negative attitudes to fruit and vegetables among some sectors of the population. Following the intensive awareness campaign during NHEDW, a postal survey found that 40% of adults were aware of the campaign. A process evaluation was also carried out, showing that all health boards were of the opinion that Healthy Eating Week was still a good promotional strategy for healthy eating messages. In the years since 1993 there has been escalating media coverage as seen in the figure opposite.
The general conclusion is of high profile, acceptable campaigns which achieved good cross sectoral co-operation with the various vested sectors, supported by good quality educational materials.

1.B. Community Nutrition Service

In the Framework for Action it was recognised that dietitians, in particular community dietitians, would have an important role to play in its implementation. Community dietitians were recognised as an important nutrition information resource for all primary care health professionals. Their role in nutrition education programmes in schools and with community groups was also acknowledged. A commitment was given in the Framework for Action for community dietitians to be appointed to all health boards within the period of the 5-year Framework.

A pilot community nutrition post was established in the Western Health Board in 1992 and this was evaluated by means of a process evaluation by the Community Nutritionist herself on activities undertaken, and two cross sectional impact surveys by the NNSC in NUIG. The findings of the process evaluation indicated a need for the development and implementation of a regional nutrition strategy. The impact found that on the whole nutrition knowledge of health professionals targeted by the community nutritionist was good but improved after exposure to the nutrition service. There were different needs on the part of health professionals, both in terms of content of materials and depth in which certain topics were covered. Not surprisingly primary care physicians required clinical information on issues like diabetes and obesity whereas school teachers needed more general healthy eating guidelines.

Following the success of the community nutrition service pilot project, others were initiated in the Midland, North Western and Mid Western Health Boards. The North Eastern and South Eastern Boards already have this service. The Eastern Health Board will shortly initiate a community nutrition service. A community nutrition network was set up in 1996 and is being co-ordinated by the Health Promotion Unit's dietitian.
1. C. Other Community Initiatives

Public Health Nurses and General Practitioners are key targets for nutrition education both at health board and national level. An information package was developed by the Health Promotion Unit for use by PHNs. The information package included an eight minute audio visual cassette on healthy eating using the Food Pyramid, posters, leaflets and a 20 page full colour book with healthy eating information and recipes, a list of most often asked questions/answers and a briefing session by a dietician. There was close to a 90% uptake at health board level and an evaluation found that those who participated in the programme found it had been very useful.

An initiative for general practitioners, which involves a case study approach together with healthy eating guidelines briefings is currently being investigated. It seems likely that direct contact with the community nutritionist at continuing medical education meetings for general practitioners which is already underway in a number of health boards, will be the best approach.

A recent development (1995/96) is the presence of the Health Promotion Unit at the National Ploughing Championships. This major rural exhibition attracts about 150,000 members of the agri-community annually and provides a platform for the HPU to interface with farmers and their families, a very important target group who may otherwise be difficult to access.

2. Schools

The Health Promotion Unit regularly produces leaflet material for school use. However its most significant investment in nutrition education during the framework for Action was in the Nutrition Education at Primary Schools (NEAPS) programme, a joint initiative between the Health Promotion Unit, the Department of Education and the North Western Health Board. This purpose designed education programme was adapted for Irish school children (3rd and 4th class) from materials used in the Minnesota Heart Health Programme and was implemented over a two year period in two pilot areas, the North Western and Eastern Boards. The evaluation of the NEAPS programme showed that compared with reference schools there were significantly increased levels of knowledge following the programme and a significant trend towards reported healthy food preferences, an effect most marked in rural rather than urban schools. Following on the success of the pilot project, the NEAPS programme is now in operation in a number of schools in most health boards.

3. Workplace/Industry

During the period of the Framework for Action a major nutrition education collaboration has taken place between the Health Promotion Unit and the Irish Heart Foundation. In association with the Happy Heart programme, a community action programme developed by the Irish Heart Foundation, two nutrition related Happy Heart projects have been underway since 1993. These are Happy Heart at Work and Happy Heart Eat Out. The Happy Heart at Work initiative includes a programme on healthy eating, with an award system for workplaces successfully completing a catering audit, monitored by a dietitian. The process evaluation yielded a good satisfaction rating and an impact evaluation is planned.
Annually, Happy Heart at Work national healthy eating materials are produced for the NHEC and launched during NHEW. These focus on the specific healthy eating guideline being promoted and include recipes from participating companies.

4. Health Care Facilities

Various hospitals have been certified with the Happy Heart at Work Healthy Eating Symbol for Staff Restaurants. On a wider, more structured scale, the Health Promotion Unit has initiated discussions with all of the health boards with regard to developing a healthy catering protocol for healthcare facilities. Some boards had already started working with hospital caterers. The health board community nutritionists are working with the Health Promotion Unit on devising healthy catering guidelines for acute hospitals. It is planned to target long-stay hospitals and institutions at a later stage. These initiatives support the Health Promoting Hospitals network established by the HPU.

5. Population Sub Groups

The Health Promotion Unit have been actively conducting a peer led education programme among low income groups. This project is called Food and Health and is a nutrition education programme initiated by the HPU and the Eastern Health Board. It uses a peer-led community development approach and is aimed at low-income women. The two-year pilot phase, carried out in association with the Greater Blanchardstown Development Project, trained 13 local women as food and health leaders, receiving training in nutrition education and facilitation skills. The nutrition education centred around a 10 week course and provided the template for courses the leaders would run themselves. A working resource pack for use by the leaders was written by the Project Dietitian and reviewed by the leaders. The leaders are presently running their own courses in their communities.

At all stages of the project, formal and informal feedback was provided by leaders, participants and project facilitators. Process and impact evaluations have been carried out by the HPU and the final report from the pilot phase is now available. The evaluation showed that among the peer leaders the percentage of energy from fat dropped significantly with a corresponding improvement in the balance of fats eaten. Dietary fibre, folate and vitamin C intakes increased significantly. Nutrition knowledge and attitudes also improved among leaders and participants as a result of their training course.

Since the pilot project two other local projects in the Eastern Health Board training local trainers have been implemented. Other health boards are currently considering using the Food and Health project as a model to reach low income groups with nutrition education.

A Nutrition Information Campaign for the Elderly was also a joint project between the Nutrition Advisory Services for the Elderly, Eastern Health Board and the Health Promotion Unit. An information pack containing a slide pack and leaflets on healthy eating for the elderly was developed for public health nurses and other educators. Also a handbook for caterers in institutions catering for the elderly was made available to all such institutions throughout the country.

On-going information resources are available for infants and young children on nutrition and these include food and babies and the Book of the Child.
6. Food Industry
As part of the Health Promotion Unit/Irish Heart Foundation Happy Heart Programme, an initiative targeting restaurants, hotels and pubs in the Happy Heart areas has been underway since 1993. This initiative is called the Happy Heart Eat Out and aims to provide healthy food choices on menus in selected eating establishments during a designated time as part of each annual campaign. While the campaign is short-term, process evaluations have found that chef/owners of the restaurants have agreed that the healthy eating criteria recommended for participation in the campaign will continue to be included in menus throughout the year. More than 500 restaurants participated in the 1996 campaign. Plans for Happy Heart Eat Out Awards for restaurants are also under discussion.

7. Retail Outlets
In 1995 a retailers initiative was implemented on a pilot basis. This retail award scheme included the following; door stickers for participating supermarkets, blank posters for monthly healthy eating special offers, monthly action return forms and monthly mail out of back-up support materials.

There was enthusiastic response from most of the supermarkets. However, evaluation on the ground showed little visibility in the supermarkets of the campaign. Given the level of funding required to make the campaign nationally successful the pilot was terminated but discussions are planned on how to implement such a campaign more successfully.

Another key feature in 1996 was the merchandising carried out by the HPU in the supermarkets. This was found to be necessary if healthy eating messages, posters, leaflets is to be achieved at the point of sale.

8. Networking with Other Organisations
A number of joint nutrition education projects have taken place during the Framework for Action; Happy Heart at Work (Irish Heart Foundation), Four or More a Day for Better Health (Irish Cancer Society), Food and Babies (Irish Nutrition and Dietetic Institute), Food from Our Farms - National Ploughing Championships (An Bord Bia).

One of the most successful networking examples is the annual NHEC theme recipe competition with the Irish Countrywomen’s Association which is organised by the Health Promotion Unit in association with An Bord Glas.

1997 - Nutrition Health Promotion Actions
While the Nutrition Health Promotion Framework for Action set out plans for actions to be initiated and progressed during the 5 year timeframe, many of these actions are ongoing and will continue to form the cornerstone of each annual healthy eating campaign. Many of the Framework for Action initiatives will be ongoing and will be reviewed, evaluated and modified as the need arises. Many will continue to be used to help achieve the targets set out in the Health Promotion Strategy and will form part of the forthcoming action plan for nutrition initiatives to the year 2005.
ROLE OF THE NATIONAL NUTRITION SURVEILLANCE CENTRE

One of the recommendations in the Framework document was that progress towards achievement of its targets should be measured. The National Nutrition Surveillance Centre was established by the Department of Health at NUIG in 1992 and has been actively collecting Irish data relating to nutrition and health since that time. One of the aims of setting up and maintaining a comprehensive nutrition data base is to assess the nutrition status for the purposes of targeting, designing, monitoring and evaluating policies and programmes.

Increasingly it has been recognised that information on diverse factors other than nutritional status e.g. food prices, behavioural change, need to be considered in assessing overall food and nutrition systems. The approach taken by the NNSC has been to collate data from the various elements along the food chain. These include national food production, food retail, import and export of food, patterns of household expenditure on food and food and health data.

Such monitoring is vital to policy making and research and provides an information data base for public policy decisions related to identifying high risk groups that need nutrition assistance and nutrition intervention programmes; monitoring food production and marketing; providing information about the relationship between diet, nutrition and disease; evaluating nutrition intervention programmes; and evaluating changes in agricultural policy that may affect the healthfulness of the Irish food supply.

The key findings of the first three reports were:

(a) that the evidence of what we were actually eating in Ireland was in some respect at odds with the popular perception about diet (1993) in that there had been dramatic changes favouring increased fat consumption throughout this century, though contemporary rural patterns were likely to be more favourable than urban patterns;

(b) our morbidity and health status indicators generally were inadequate for policy advice, necessitating a needs assessment information framework, including new dietary surveys;

(c) the changes in the food chain are complex, rapid, outside the control of the traditional health sector and with likely mixed impact on the health and well-being of the population.
Chapter Three

Nutrition Health Promotion Nationwide - Survey Results

While the Health Promotion Unit is responsible for co-ordinating much of the nutrition related activities around the country and operates a very effective network system, other bodies such as Health Boards, non governmental agencies and food organisations are very actively involved in nutrition related activities also.

One to one interviews and supplementary postal surveys were undertaken with key providers in these various settings for this review. These have shown that a wide variety of nutrition education and promotion activities have been ongoing nationwide over the past 5 years.

While National Healthy Eating Week/Campaign is the main focus for most groups who on the ground demonstrate a major concerted action in the promotion of the same nutrition message, a wide variety of activities in the settings outlined in the Framework document are carried out, as tabulated below.

The information outlined in this chapter is based on structured one to one interviews and postal surveys, NHPN Survey (NNSC 1997). The interviewees were asked for their general views on the five year Framework, their views on the appropriateness of the healthy eating guidelines, specific activities they themselves were undertaking, planned future actions and recommendations for the future.

Reactions to the Framework were mainly favourable; however those working on the ground felt that they needed more direction in terms of how to carry out specific programmes, which they felt should come from the Health Promotion Unit. Allied to this is an issue of appropriate training. Respondents felt that the Healthy Eating Guidelines were attainable, but again would look to the HPU in the Department of Health to provide specific guidelines, and thus presumably more educational materials for population subgroups.

In their recommendations for a food policy, the Nutrition Advisory Group avoided being over prescriptive about such issues and this may need to be addressed if usable operational guidelines are to be evolved. A wide variety of nutrition activities are being carried out around the
country. While most of these are based on settings, as set out in the Framework some organisations have based programmes on needs assessment in their own areas. On the whole the needs of the community, and those of both patients and staff of hospitals and other health care facilities have been tackled separately in the various health board areas, whereas some of those interviewed felt that the hospital should be seen as part of the community and health promotion programmes in this setting should reflect this idea. The need for baseline data on which to base interventions was continually mentioned in the interviews. This reflects the importance of local and national data on which intervention programmes may be based. A very strong networking system has been in operation and presumably played a major role in the promotion of healthy eating.

Table 2: Summary of those Interviewed (n=number of respondents)

<table>
<thead>
<tr>
<th>Category of Organisation</th>
<th>Type of Organisation</th>
<th>Titles of Nominees</th>
<th>Method of Consultation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Sector (n=13)</td>
<td>Health Boards</td>
<td>Directors of Public Health/ Public Health Specialist Health Promotion Officers Programme Managers Community Nutritionists</td>
<td>Face to face structured interviews Telephone/ postal interview</td>
</tr>
<tr>
<td>Food Related Organisations (n=7)</td>
<td>Food Agencies</td>
<td>Nutritionist</td>
<td>Face to face structured interview Telephone/Postal interview</td>
</tr>
<tr>
<td></td>
<td>Food Retailers</td>
<td>Marketing Manager Food advisor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional Food Writers</td>
<td>Members</td>
<td></td>
</tr>
<tr>
<td>Non Government Organisation (n=8)</td>
<td>Voluntary Health Organisations</td>
<td>Health Officers</td>
<td>Face to face structured interview</td>
</tr>
<tr>
<td></td>
<td>Low Income Groups</td>
<td>Project Co-ordinator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health Education</td>
<td>Health Officer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional Organisations</td>
<td>Executive Co-ordinator</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the interviews, postal surveys were carried out with health board workers and Happy Heart at Work and Eat Out programme participants to enquire about various aspects of healthy eating. These included nutrition activities they had been involved in excluding healthy eating weeks, what they knew about the relationships between diet and disease and what information they would like which would help in their job of raising awareness and behaviour change in the general public in relation to healthy eating. The results from the postal surveys reinforced those of the interviews.
<table>
<thead>
<tr>
<th>Organisations</th>
<th>Community</th>
<th>Schools</th>
<th>Industry / Workplace</th>
<th>Health-Care</th>
<th>Population Sub-Groups</th>
<th>Food Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Sector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established CN Posts;</td>
<td>AMO's, Dentists</td>
<td>Collaboration with IHF Happy Heart at Work</td>
<td></td>
<td>Healthy Eating Policy for catering managers;</td>
<td>Women;</td>
<td>Happy Heart Eat out</td>
</tr>
<tr>
<td>N.H.E.W.</td>
<td>Bi Follain; NEAPS</td>
<td></td>
<td></td>
<td>HPU, Hand-book;</td>
<td>Teenagers;</td>
<td></td>
</tr>
<tr>
<td>NAG;</td>
<td>Healthy Lunch Box Campaign; Eating disorders Information;</td>
<td></td>
<td></td>
<td>Bringing together all Key Players in the food chain.</td>
<td>Elderly;</td>
<td></td>
</tr>
<tr>
<td>Lifewise programme;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>People with Disabilities</td>
<td></td>
</tr>
</tbody>
</table>

<p>| <strong>Food Related Organisations</strong>   | Recipes;  | School Garden, Healthy Lunch Literature; Cookery Competition; Cookery Demon; Nutrition &amp; Sport; Osteoporosis Information; Talks; Videos; Puppets shows; | Promotion of Clean Handling; Leaflets of Fish; Work with Contract Caterers; | Potato/Fish Recipes for staff; Cookery for Nurses; Resources for Clinics; | Housewives; Slimming Groups; Diabetes; Men; Low Income; Travellers; Youth; Elderly; Prisons; | Chef (cert) Literature; |
|                                  | Cooking Skills; |                                  |                     |                            |                       |                 |
|                                  | Nutrients in Foods; |                                  |                     |                            |                       |                 |
|                                  | N.H.E.W. |                                  |                     |                            |                       |                 |</p>
<table>
<thead>
<tr>
<th>Food Related Organizations continued</th>
<th>Community</th>
<th>Schools</th>
<th>Industry / Workplace</th>
<th>Health-Care</th>
<th>Population Sub-Groups</th>
<th>Food Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition Adviser; Seasonal Promotion; N.H.E.W.; Nutritional Aspects of Food;</td>
<td>Information on request; Taste Test Activities;</td>
<td>All New Employees targeted; All staff updated; Happy Heart at Work Award; Creating Healthy Recipes for Staff; Advisory to C.I.E.</td>
<td>On request</td>
<td>Infant Feeding; Egon Ronay Guide research;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N.H.E.W.; 1994 Nutrition &amp; Cancer; Reports on C.N. in Ireland;</td>
<td>2 day course for Teachers; Information for School Projects;</td>
<td>Construction Industry; Analysis of Catering Menus; Information on Healthy Eating for Staff</td>
<td>Hospital Staff; Analysis of Catering Facilities in Hospitals;</td>
<td>Disadvantaged Groups; Diabetics; Low Income; Sports Groups; Open Days for G.P.s;</td>
<td>Happy Heart Eat Out; H.H.A.W.; Restaurants in Food Industry; Advisory to Food Industry</td>
<td></td>
</tr>
</tbody>
</table>

CN : Community Nutrition
N.H.E.W. : National Healthy Eating Week
I.H.F. : Irish Heart Foundation
N.A.G. : Nutrition Advisory Group
H.P.U. : Health Promotion Unit
H.H.A.W. : Happy Heart at Work
Chapter Four

Diet and Health
-An Update on Irish Evidence

For the purposes of this document an update on the Irish and international evidence on diet and health is presented. While it is not a definitive review it summarises the available literature. The Health Promotion Unit of the Department of Health has in the past five years used the 1987 revised healthy eating guidelines and the Nutrition Advisory Group recommendations 1995 as the basis for nutrition health promotion in Ireland.

In its lifetime the Framework plan concentrated directly on the promotion of four of the guidelines:

(a) promotion of a varied diet,
(b) being a healthy weight through healthy eating and regular exercise and
(c) the increased consumption of breads, cereals and potatoes.
(d) the increased consumption of fruit and vegetables

A review of food and health databases and the scientific literature has been compiled by the NNNS which reinforces the relevance of addressing those guidelines chosen for the healthy eating week themes.

At the outset of the Framework for Action there was no collated database on nutrition in this country. A nutrition survey was conducted in 1990 by the Irish Nutrition and Dietetic Institute which was the first for forty years and was in part the basis for the Framework plan. Since then the NNNSC was established and other organisations such as Nutriican have carried out a comparison of different European food and nutrition surveys. A number of sub-surveys have also become available and have been reviewed in previous NNNSC reports (NNNSC 1993, 1994, 1995). It is not appropriate to attribute the changes seen in dietary behaviour to the presence or not of a concerted national programme like the Framework for Action since no formalised evaluation was undertaken. In any case it would be very difficult indeed to attribute change solely to the Framework given the complex range of influences on dietary behaviour. We can however comment on the trends from available evidence on key dietary behaviours targeted to date and recommend on the need for future initiatives.
1. The Irish diet has become much more varied over the past number of years. Awareness of food and what constitutes healthy eating has increased but the available data from the pan-European consumer attitude to food, nutrition and health survey indicate that only about one third have actually changed or taken steps to change their diet due to a belief that it is unhealthy (IEFS 1996). Similar numbers also said that eating healthily was a main influence when choosing foods. A key part of more modern nutrition education campaigns has been to stress that there are no bad foods as such, but rather an imbalance in what we are eating and in Western countries at least a pattern of over eating. The US Food Guide (USDA 1992) lists itself as graphical construction and it is from this that the Food Pyramid concept evolved (Anderson 1993). The pan-European survey also found that the definition of healthy eating was described as eating more fruit and vegetables by 57% of Irish respondents. Other nutrition guidelines such as those to eat less fat (39%) and a balanced varied diet (28%), were also commonly mentioned as definitions for healthy eating (IEFS 1996). Attitudes towards fat and fibre have been shown to differ between men and women with ‘fat-phobic’ and ‘fibre-phlic’ attitudes being more prevalent in women. The first and third Nutrition Surveillance reports documented the remarkable changes in food production and distribution patterns that have been occurring steadily for almost a hundred years but more particularly in the last 25 years. For instance snack foods and frozen food sectors have grown dramatically at rates of about 20% per annum. The Happy Heart National survey found 27% of those surveyed ate chips or roast potatoes at least twice per week. Positive increases have however continued to be observed in the consumption levels of fruit, vegetables, rice, pasta and fish over the past number of years as shown in the diagram below:

<table>
<thead>
<tr>
<th>Table 4: Food Balance Sheet Figures (kg per capita)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>1988</td>
</tr>
<tr>
<td>1988</td>
</tr>
</tbody>
</table>

Source: Food and Health Indicators, FAO/WHO 1993

2. There appears to be an increasing problem of obesity, measured as levels of body mass index (kg/m²), assuming Ireland is following world trends, with prevalence figures of 20% being common in European women. The Irish 1990 national nutrition survey found that 53% of Irish men were classified as being overweight and a further 10% as obese (BMI>30). The figures were slightly lower for females with 33% classified as overweight but 15% were found to be obese (BMI>28). The figure below gives a summary of available data on the prevalence of obesity in Ireland and the UK.
The Kilkenny Health Project (Shelley et al 1996 and 1997) found obesity levels had increased in both males and females in the older age groups between 1985 and 1991, from 17% to 23% in males and 20% to 27% in females.

The distribution of fat on the body is at least as relevant to risk of disease as total body fatness (Bjorntorp 1990). Abdominal obesity, or the apple shape, is characterised by a high waist-hip ratio and tends to be more common on men. This shape has an increased risk of cardiovascular disease development. Women are more likely to be pear shaped with the subcutaneous fat accumulated on the hips (Krookiewski et al 1983).

On balance researchers suggest that to maintain weight loss and control hunger, low fat consumption is necessary in collaboration with a high carbohydrate intake, as opposed to a low fat, low carbohydrate diet. Physical activity levels of Irish adults are unknown but research in the eighties indicated that less than half participated in exercise and that those who did were under 30 years old. The indication is that physical activity levels are low especially for young females and those over the age of 40 years. Data from the 1990 Nutrition Survey and the Lifeskills schools programme show low levels of participation in vigorous exercise amongst young females.

**Percentages of Irish Girls and Boys participating in Vigorous Exercise**

<table>
<thead>
<tr>
<th></th>
<th>INNS</th>
<th>Lifeskills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>Girls</td>
<td>30</td>
<td>35</td>
</tr>
</tbody>
</table>

Irish National Nutrition Survey (INDI 1990): high activity exercise, ages 15-18 years
Lifeskills (Nicolai & Kelleher 1995): exercise at least 4 times per week, age 15 years

Sedentary past-times are becoming more prevalent in younger people with over half of boys and girls surveyed in the North West of Ireland watching television for more than two hours per day.

3. *We continue to have relatively low fibre intake.*

Research has continually shown fibre-rich foods to have a protective effect against a variety of chronic diseases and that the fat:carbohydrate (fibre) intake ratio may have implications for obesity weight loss maintenance. According to the last Irish nutrition survey, although
bread, cereals and potatoes accounted for over half of the total carbohydrate intake and 55% of the fibre intake of the general population, actual fibre intake levels were below the recommended 19 gram/day and was the lowest intake, second only to Northern Ireland when compared with other European countries. Food balance sheet figures however indicate that consumption of foods rich in fibre has increased in Ireland in recent years, with levels of potato, rice and pulses showing continuing surges in intake as shown in the figure below.

**Time Trends in Potatoes and Cereals Consumption**

![Graph showing cereal and potato consumption](image)

**Source:** Food and Health Indicators 1993, CSO 1997

Compared with other European countries, Ireland has the highest consumption of potatoes at 218 gram/day as recorded in the 1990 nutrition survey. The Happy Heart survey of 1992 found that 59% of the people surveyed consumed potatoes seven or more times per week.

4. **There is some evidence of increases in fruit and vegetable consumption.**

A recent pan-European survey (IEFS 1996) found that almost 60% of the Irish public are aware that healthy eating also constitutes eating more fruit and vegetables. There are signs that the consumption levels of these foods are increasing but at the start of the nineties Ireland had one of the lowest intakes in Europe. The Happy Heart national survey found that only 8% of those surveyed consumed vegetables twice or more per day and 25% ate fruit with similar frequency. A survey of mothers with children aged 5-12 years said the children were eating plenty of fruit and vegetables and other high fibre bread, cereals and potatoes plus rice and pasta (HPU 1997). The 1994 crude consumption figures available from the Central Statistics Office show vegetable consumption, excluding potatoes, at 84 kg per capita. The most commonly purchased vegetables in Ireland are potatoes, according to a survey of 1,000 households carried out by Taylor Nelson AGB for An Bord Glas.

The dietary guidelines recommend four or more servings per day of fruit and vegetables in addition to potatoes, peas and beans. The issue of encouraging more fruit, vegetables and fibre-rich food consumption has been addressed by previous healthy eating weeks and the impact will be known once national nutrition data becomes available.
5. Future Directions: What evidence of Need?

Indirectly some of the other guidelines have also been incorporated into the healthy eating week/year messages by helping to discourage high fat intakes. However the scientific data suggest that emphasis must also be placed clearly on the issue of relative fat reduction.

From the 1990 nutrition survey it appears that the predominant type of fat in the Irish diet was saturated and that a large percentage of males (60%) and females (71%) surveyed consumed more than the recommended amount of fat as a percentage of their total energy intake. The major source of this was meat and meat products which accounted for 25% of the total followed by milk (17%) and spreadable fats – including butter (15%). Biscuits, cakes, pastries, savoury snacks, chocolate and chips accounted for 24% of total fat consumed. Unfortunately the insufficient power of the study due to the small sample size did not allow discrimination across socio-demographic groups. Subsequent food surveys indicate that most people still consume whole milk products, that fried food is regularly eaten, particularly by working populations and attitudinal surveys indicate that the general public are sceptical about the role of diet in heart disease, particularly fat and believe the experts to be in dissent. Given that fat consumption is a problem which must be tackled there are a variety of foods which should continue to be promoted in large amounts, like fruits, vegetables and cereals, breads and potatoes and others which should also be included in sensible amounts, such as lean meat, fish and dairy produce (with an emphasis on lower fat choices). Foods on the top shelf of the Food Pyramid (oils, spreadable fats, biscuits, cakes, pastries, savoury snacks and chocolate) should be targeted first.

The guidelines on sugar and salt level reduction have also not been addressed as a major theme. The alcohol issue has been dealt with independently, through the development of a dedicated alcohol policy.
There are two central questions that arise from this review; what priority nutritional issues need now to be addressed in our society and secondly what framework should now be put in place to address that need. We conclude that there has been an increased profile for nutrition initiatives during the timeframe of the Framework, that it may well have contributed to behaviour changes observed during the period but there are a range of forces at play that need to be taken account of, that a network of training, education and service delivery has grown up during the time which could be utilised and we make recommendations on how we should proceed to take next Framework programme into the year 2000 and beyond. These points are discussed in detail below.

1. There has been an increased profile for nutrition during the period of the Framework for Action initiative.

The audit of activities undertaken by the Health Promotion Unit itself indicates that there has been action in all of the seven areas listed in the Framework. The National Healthy Eating Week concept grew from a publicity opportunity in Dail Eireann in 1991 to what is now a year round healthy eating publicity network. The Healthy Eating Week/Campaign has harnessed support of the traditional health sector, the professional nutrition and dietetic service and a range of workplace sites particularly through the joint HPU / Irish Heart Foundation Initiative. All of the key Health Board personnel interviewed were aware of the broad initiatives encompassed in the Framework Document and of Healthy Eating Week in particular and the other respondents in the two postal surveys were aware too. There was broad endorsement of the activities. A review of the media’s clippings indicates that the volume of publicity was considerable and almost all of the publicity was in the appropriate direction. The professionalism of the materials and their visual quality was much praised.

However, there was a variety of opinion on the likely effectiveness of the increased profile. Some of the professional health educators felt that more explicit health education principles e.g. suitable health promotion models of good practice in different settings might have been incorporated into the Framework. Health Promotion is defined as a process of enablement and
the means to change apply as much to diet as any other lifestyle activity. Specific educational initiatives now receiving more widespread application include the NEAPS programme, the Food and Health initiative and the Happy Heart programme. A new education pack on the issue of breastfeeding is being prepared for health professionals by the Department of Health Promotion at NUIG and the HPU. More specific training is addressed further below. There was evidence that at health board level parallel initiatives were evolving using similar principles and guidelines but not part of a concerted strategy. This is appropriate as indeed are the activities of professional groupings and food organisations. What might well be appropriate is the coordination of such activities and indeed there was a perception at health board level that a more explicit strategic leadership role might have been adopted by the Health Promotion Unit. This role needs to be set in the context of the various developments in the health strategy generally. Both the Health Promotion Strategy (1995) and the Advisory report by the NAG Committee (1995) endorse the Department of Health’s Healthy Eating Guidelines as seen in Table 5 below.

Table 5: Healthy Eating Recommendations

<table>
<thead>
<tr>
<th>Food and Nutrition Policy, NAG 1995</th>
<th>Health Promotion Strategy, HPU 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Eat a wide variety of foods</td>
<td>• Educating and motivating Irish people to eat a wide variety of foods</td>
</tr>
<tr>
<td>• Balance energy intake with physical activity levels</td>
<td>• The encouragement of the achievement and maintenance of a healthy weight through healthy eating and regular exercise</td>
</tr>
<tr>
<td>• Eat plenty of fruit and vegetables. Aim to eat at least four servings every day</td>
<td>• The achievement of a moderate reduction of 10% in the percentage of people who are overweight and a reduction of 10% in the percentage of people who are obese by the year 2005</td>
</tr>
<tr>
<td>• Starchy foods such as bread and cereals should be eaten daily</td>
<td>• The encouragement of a reduction in total fat intake to no more than 35% of energy as fat by the year 2005 and to attain an appropriate balance of fats</td>
</tr>
<tr>
<td>• Frequent consumption throughout the day of foods containing sugar should be avoided, especially by children</td>
<td></td>
</tr>
<tr>
<td>• Total fat intake should be reduced, with emphasis on reducing saturated fats</td>
<td></td>
</tr>
</tbody>
</table>

It is clear that these guidelines could form the basis for policy at local, regional and National level but it is as much a priority for local boards as it is a responsibility of the HPU to develop these. The evidence of media evaluations are that in general they are more successful where there are local initiatives as well. To some degree this is where the micro and macro approach can meet. Two of the aims in the national strategy are quite specific with quantified targets and
if these are to be attained we will need adequate baseline nutritional data and a cross sectoral operational plan which involves both education and food sector as well as the health boards. This is discussed further below. Given the ongoing dialogue about the inter-relationship between obesity, excess calorie intake and type and quantity of food consumed it would appear best to amalgamate these two objectives for the purposes of an effective long term healthy eating programme. Since the populations at least risk are those both with a low saturated fat intake and a high energy output, such a programme should be evolved. This could include specific dietary reductions in saturated fat intake, increases in fruits, vegetables and whole grains as already emphasised and the prevention of excessive weight both by greater physical activity and reductions in overall caloric intake.

2. Has the Framework had any impact on dietary behaviour, either generally or in the context of the specific healthy eating guidelines addressed?

We believe that there have indeed been beneficial changes and that the Framework initiative played its part but it is difficult to substantiate this conclusion. Firstly we have no database adequate to monitor trends. The NNSC has collated all available information for the relevant 5-year period earlier, but this quite simply is not adequate and we need more substantive information. The morbidity and food consumption trends fit in with the limited available attitudinal and behavioural data. However no comprehensive food consumption survey has been undertaken for over seven years and the last one was unable to discriminate trends in specific nutrients and according to demographic patterns. A large scale North South Survey should contribute substantially to our knowledge on individual dietary intake when it becomes available in 1998 and the HPU has commissioned a regular lifestyle survey which will inform about dietary trends across age and social class bands and in association with other lifestyle variables. The combination of these two information sources will be invaluable for planning and monitoring purposes. What evidence we do have indicates definite changes, some positive and some negative, summarised in Table 6.

### Table 6: Changes in the Irish Diet and Health Status

<table>
<thead>
<tr>
<th>Positive Changes</th>
<th>Negative Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premature mortality from diseases of circulatory system decreasing</td>
<td>High premature mortality from Ischaemic Heart Disease relative to our EU neighbours</td>
</tr>
<tr>
<td>Over a 100% increase in vegetable and products consumption since sixties to date</td>
<td>Increase in prevalence of obesity</td>
</tr>
<tr>
<td>200% increase in pulses and products consumption</td>
<td>Fruit and vegetable intake remains below the recommended number of servings per day</td>
</tr>
<tr>
<td>Increased consumption in fish,</td>
<td>Two-fold increase in processed foods consumption since 1980</td>
</tr>
<tr>
<td>Reduction in total energy consumption</td>
<td>One-quarter of the adult population aged 40 years plus have little involvement in sport of any kind including walking</td>
</tr>
</tbody>
</table>

Obesity is on the increase in our society, as evidenced in the Kilkenny Health Project evaluation and more recently in studies such as the comparison of Irish and North American women (NNSC 1996). The reasons for this are complex but suggest at least two root causes, lack of practical opportunity for exercise at all ages combined with increasingly sedentary behaviour at work and at leisure and ready access to high calorie low fibre foods for almost everyone. Consumption of saturated fat may be dropping in some situations such as spreadable fats but hidden fats were a prevalent problem in 1990 and no evidence suggests a major change in this.

Fruit, vegetable and fish consumption are all improving, as is fibre intake. The Framework cannot claim sole responsibility for this since spontaneous media interest in diet is huge; however it was a concerted initiative which arguably gave focus to such activities at a time when such trends could be capitalised upon. The new Food Safety Authority will have greater responsibility for consumer support and protection across the full spectrum of food safety and nutrition activities and will presumably become a focus for the commissioning and undertaking of relevant research.

There were few outcome evaluations but findings of some of the settings projects were encouraging. Changes in diet were mainly self reported and were not validated by food intake measures but were encouraging nonetheless. For example, the short term evaluation of the NEAPS project indicated trends in the desired direction in schoolchildren and there were some positive trends in the schools life skills evaluation as well. Given that we now have some form of health education programme in all health board areas there is an obvious opportunity for more specific school based nutrition initiative in conjunction with the health promotion and community nutrition service of all eight health boards. We also require longer term data.

The NEAPS cohorts should be followed up longer term to see if these trends were maintained.

The Food and Health initiative may prove worthwhile as a demonstration project by giving people control of the learning process through community action. The Market Research surveys were useful process tools which indicated a positive disposition on the part of the general public to healthy eating initiatives so this could be capitalised upon. Finally, the Kilkenny Health Project was the only systematic large-scale demonstration project undertaken and this showed trends in cholesterol, blood pressure in the right direction, with a relative rise in obesity more marked in the control or reference area and positive changes in relation to diet. The project implied that social class penetration was better than in the reference area in relation to reported cholesterol measurement. Given the work done with general practitioners and PHNs to date there may be a case for a more concerted primary care initiative as well. The next stages of national intervention should include a systematic evaluation component inbuilt into the budget, particularly now that there is a network of community nutritionists, health promotion departments and directors and specialists in public health.
3. **The Framework facilitated the training and education of health and education specialists during its time period.**

The first community nutrition service pilot project, supported for 2 years by the HPU, was established and evaluated in the Western Health Board area and since then a network of other similarly supported posts have been established. This is a major development in public health nutrition since it opens up the opportunity for a more widespread dissemination of basic nutrition counselling skills by a range of health professionals. However, the potential for further development is obvious. The INDI has called for a team of community nutritionists per Health Board with a ratio of one per 150,000 of the population. While the INDI itself has for many years been an active organisation with increasing interest in public health nutrition, the Framework did create a climate of official support which facilitated the growth of education by and in association with such a professional organisation. There have also been educational initiatives for GPs and PHNs which could be capitalised upon. Finally, while perhaps not as well developed as yet as other areas, the industry setting has been targeted by the Happy Heart network which achieved a wide penetration.

Both in that project and in NUIG’s Health at Work programme, canteen audit and subsequent healthy eating initiatives have been well received. This could be developed further in collaboration with the Health and Safety Authority. An obvious vehicle is public sector employees, particularly health boards and perhaps in association with the new Healthy Hospital Initiative, where some hospitals have already received healthy eating symbol certificates. Finally, during the time frame of the Framework several new food advisor posts have been formulated in supermarkets; all the signs are that modern food retailers are sensitive to health and safety issues in relation to food and would be prepared to work even more closely with the Health Promotion Unit.

A number of third level institutions are providing some form of nutrition training and the Health Promotion Unit has worked with all of these. Our own master’s programme in NUIG has a strong focus on nutrition because of the presence of the NINSC here. Interest has been expressed in developing a public health nutrition degree in TCD. Such developments can only enhance the primary and secondary training of health professionals, who require increasingly specialist knowledge both about nutrition topics and the means of effective message dissemination to achieve public health goals.

4. **The Framework was innovative in taking a cross sectoral settings approach**

Given the complex nature of the food chain, the importance to the economy generally of the food industry and the intrinsic nature of food as an essential human commodity there is no possibility that a nutrition education programme could succeed without broad support from the various vested interests involved. The first four themes addressed what the nutritional evidence implied to be a problem in our population. However, the issue of fat reduction has not yet been addressed directly but the reduction of saturated fat intake will be the 1998 theme for the NHEC. Fat reduction is likely to be a strongly recurring theme given the Health Promotion Strategy targets for the year 2005. There are several reasons why this problem must be approached. Firstly the continuing high rates of heart disease, obesity and of some cancers merit specific attention to the issue. Recent reports from both the World Cancer Research Fund and the Committee on the Medical Aspects of Food and Nutrition Policy in the UK have indicated strong links between cancer and regular consumption of red meat. Secondly our guidelines advocate a reduction in total calorie intake and
a relative reduction in fat intake and if these are to be achieved a new framework needs to be put in place. We have already suggested both what such a campaign might constitute and what partnerships might be evolved. There is reason to believe that far from being controversial this might be a welcome campaign from many quarters. We are likely to see an epidemic of obesity and of obesity related disorders in the next 25 years if we do not promote a calorie reduction and increased exercise regimen. The traditional agri-industry has already responded sensitively to market demand for lower fat alternatives; as for example the co-op production sector’s move to low fat spreads or the Bord Bia campaign on lean meats. The evidence from nutrition surveillance is that the traditional rural diet may in fact be lower in fat. The image of Ireland as a green natural place is supported by An Bord Glas, Bord Iascaigh Mhara and the National Dairy Council. The new nutritional data will serve as an important baseline. More specific targeted data on the dietary intake is needed and attitudes of groups such as young women, older people or indeed those with little income in order to promote appropriate messages that can be adequately delivered. Attention might be given to a specific product such as fish in association with BIM and the Tourist Board. To achieve progress a task force of vested industries should be convened by the HPU to plan the next cycle of campaigns, focusing on a balanced attitude to fat intake.

5. More focus on cross sectoral planning at national and regional level is appropriate

Such an approach is in line with the all the previous strategies and would build on the work done to date. When the Framework for Action was launched there was little infrastructure for nutrition health promotion in the country. Policy was centrally led from the Department of Health which had both an operational as well as a strategic role. However, since that time there have been major changes in health service organisation. There is now a public health department, a health promotion service and the basis of a community nutrition service in every health board area.

There is evidence from this review that the health boards are keen to develop regional nutrition policies that are sensitive to local needs and that they can work with relevant local industries. The next Framework document should concern itself with advocating a local nutrition committee in each health board region building on the current Community Nutritionist/Liaison Officer network. The nutrition service in the Health Promotion Unit should continue to spearhead and co-ordinate national healthy eating initiatives but should devolve more the operation of regional issues to the relevant health board committee. The HPU should continue to work closely with boards when a national campaign is planned so that settings based initiatives, as in schools, workplaces or through primary care services can complement such work. The recent structures put in place in the health boards should facilitate these supportive environments. The rationale for these is described earlier. At a national level there is need to establish clear liaison between the Health Promotion Unit, the new Food Safety Authority and representatives of the academic/research community including the Nutrition Surveillance Centre in NUIG. An advisory group on nutrition could be established to achieve this purpose. In other countries a number of action task groups were established to provide guidelines on specific settings and population subgroups. The approach taken thus far in this country is ideally suited to such a development which would help achieve both the guidelines of the NAG Recommendations for a Food and Nutrition Policy and the Health Promotion Strategy within the required time frame.
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