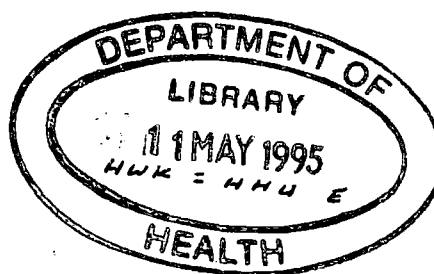


THE COMMUNITY DENTAL SERVICES

and

DENTAL HEALTH EDUCATION

*A WORKING PARTY REPORT*



Irish Dental Health Foundation

September 1994

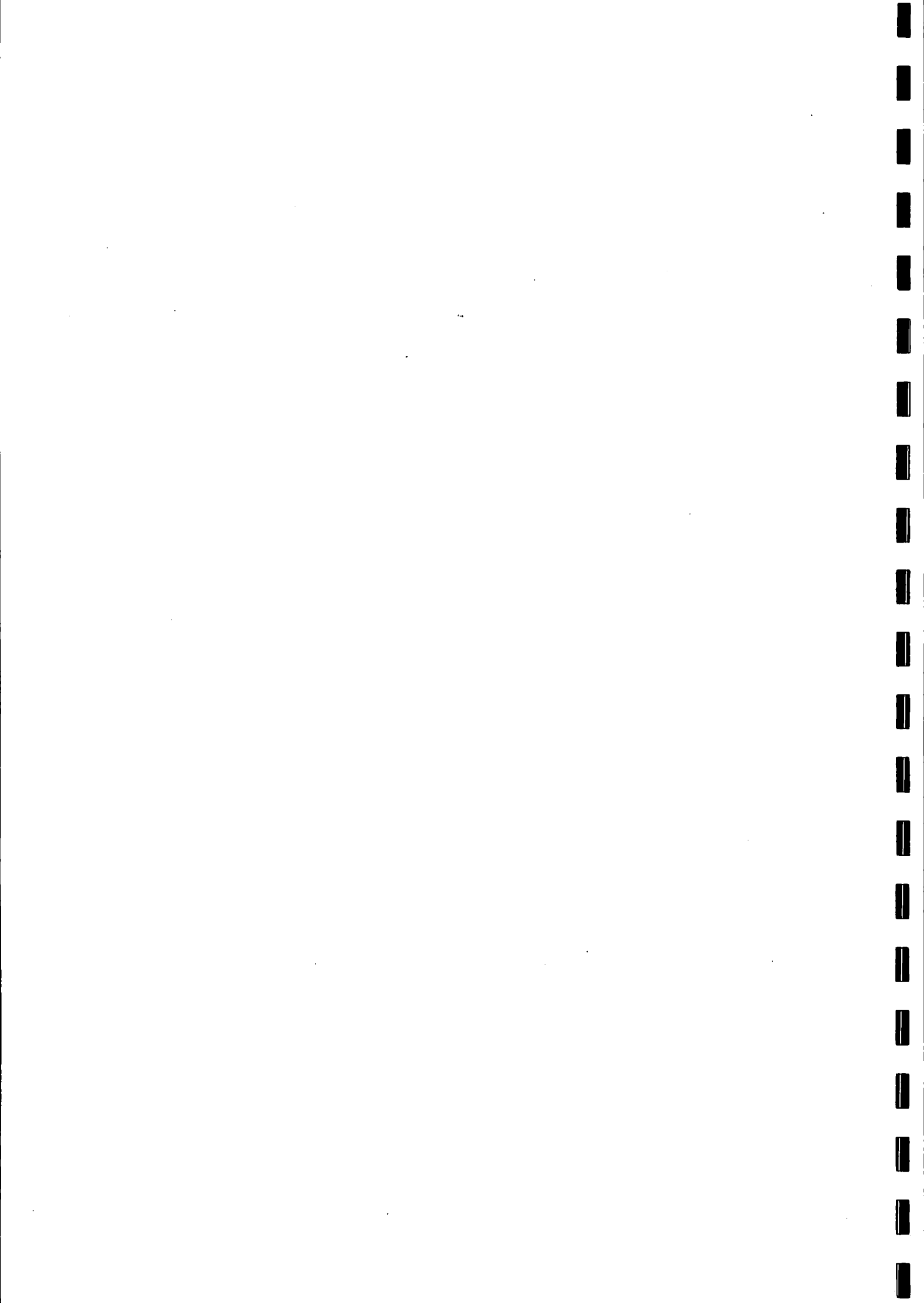
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# Contents

	<b>Page</b>
Acknowledgements	(i)
Summary	(ii)
Dental Disease - Public Health Implications	1
Remit of the Working Party	3
Towards a Working Document - Stages of Development	4
Main Findings	6
Recommendations	8
References	11
Appendices	
A    Members of the Working Party	13
B    Target Groups for Health Education	15
C    Performance Indicators	25



## Acknowledgements

The members of the Working Party gratefully acknowledge the support, interest and assistance from many health professionals (both individuals and groups) in the preparation of this report.

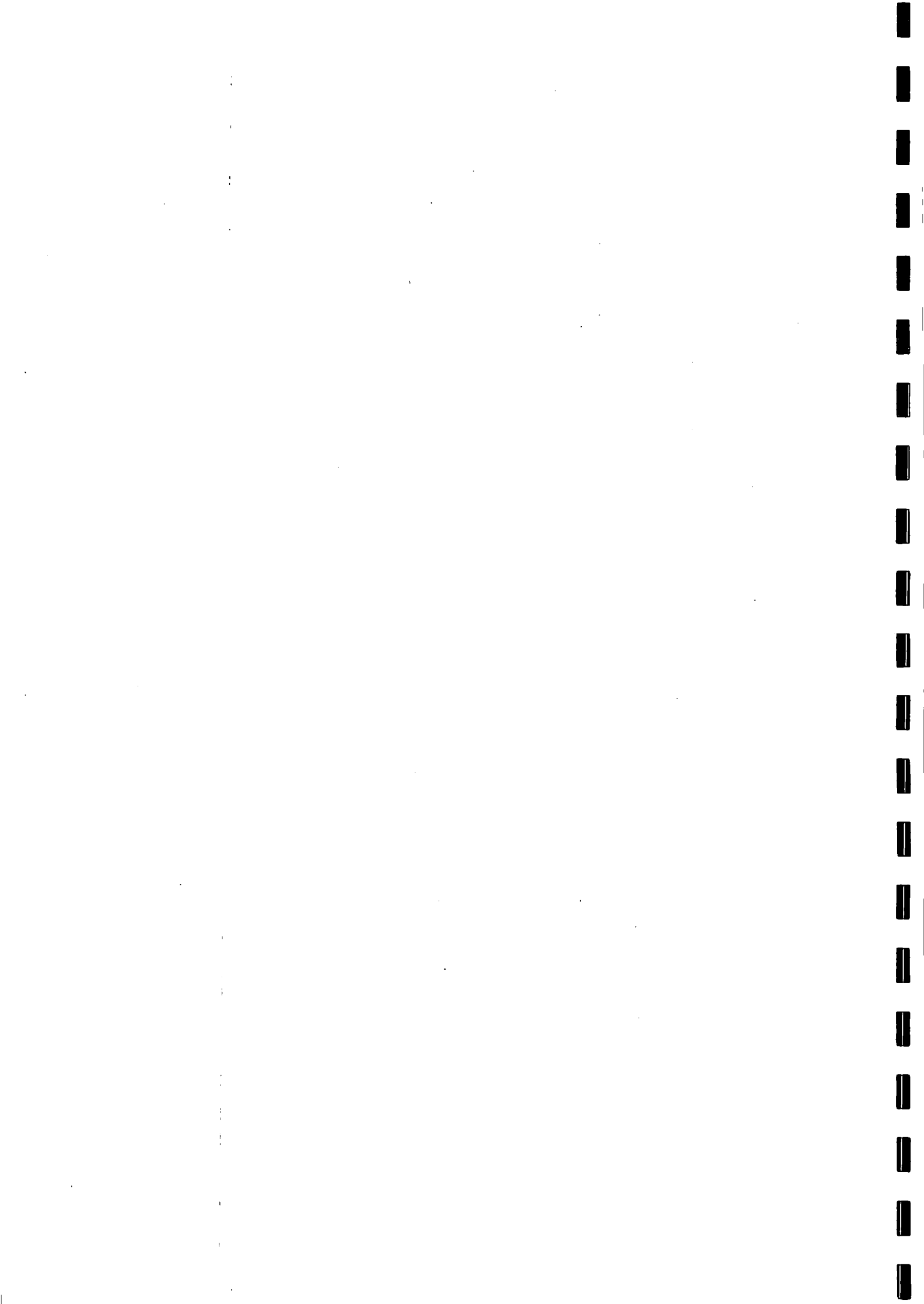
In particular, special co-operation and assistance is acknowledged from the following:

The Chairman, Dr Gerald FitzGerald and the Society of Chief and Principal Dental Surgeons in Ireland.

Ms Patti Speedy, Senior Education Officer (EHSSB) and Northern Ireland Dental Health Education Committee.

The Health Promotion Unit within the Department of Health.

Recipients of the Royal Society for Health UK Diploma in Dental Health Education obtained in Ireland 1986 and 1987.

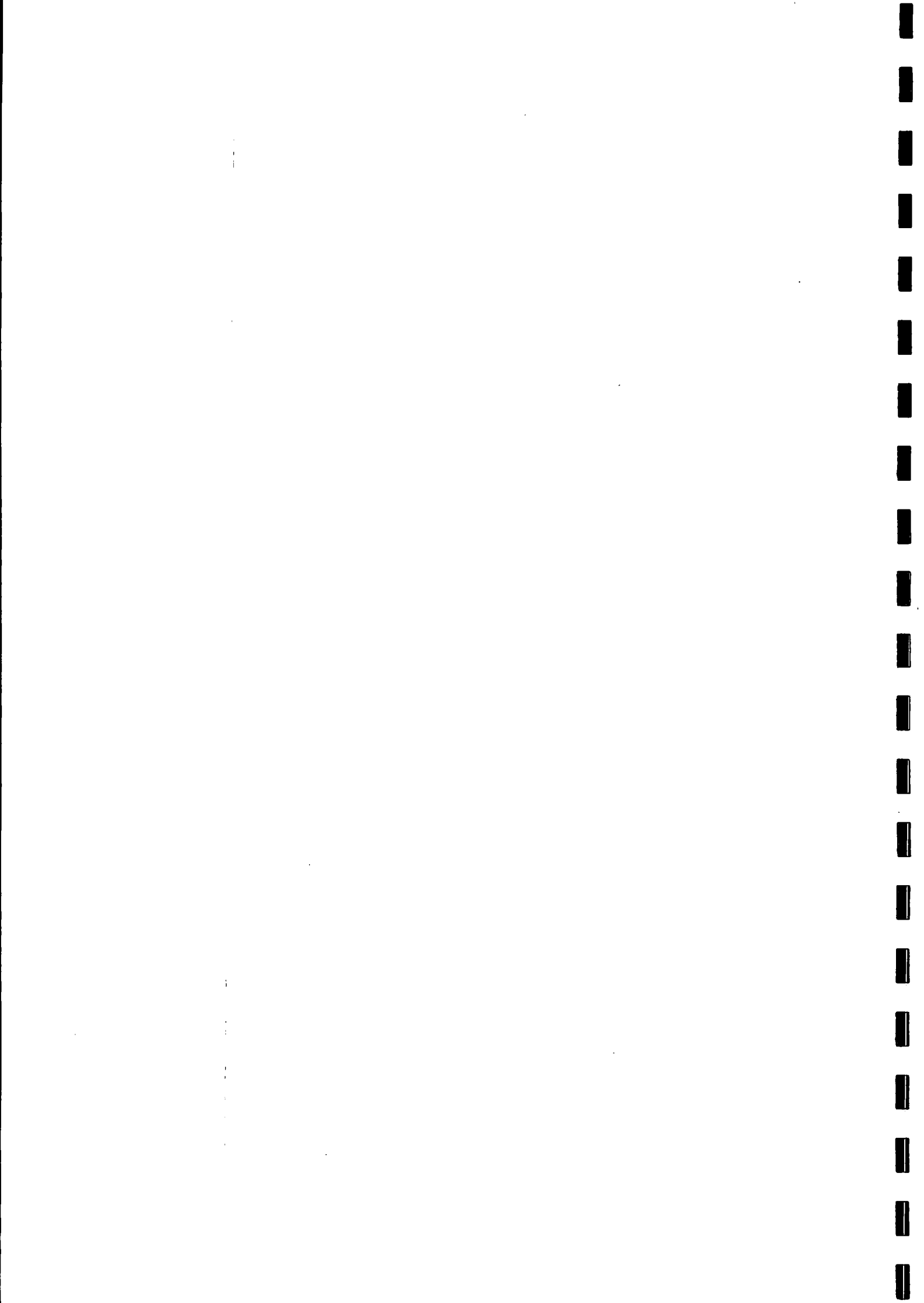


## Summary

The recently published Department of Health Strategy Document "Shaping a Healthier Future" re-orientates the health services towards a health promotion approach. This is a welcome development by the Minister for Health, Mr Brendan Howlin TD. This is in keeping with the approach set out in Health - The Wider Dimensions (published in 1986) and the 1987 Promoting Health through Public Policy. More recently, it is reflected in Article 129 of the Maastricht Treaty.

The Dental Health Action Plan announced on 26 May 1994 outlines the importance of the primary health care approach in the delivery of the dental services. However, whilst additional funding for the delivery of the country's dental service is recognised, support for prevention activities is also required if the Minister for Health's stated goals for oral health for the year 2000 are to be achieved. This re-focusing of the dental services will reflect the new Health Strategy's stated importance of both health gain and social gain for Irish people.

Detailed research and analysis has been carried out by this Working Party in collaboration with the Principal Dental Surgeons of the community dental services. It has identified overwhelming support and a clear and urgent need for the development of specific training in dental health education techniques, the development of adequate dental health education resources, together with a co-ordinated framework for action.





## Dental Disease - Public Health Implications

Oral health is described as

*"an essential part of general health, human function and the quality of life. The abilities to chew one's food, communicate orally, have a positive self-image and develop productive social interaction are adversely affected when the mouth or contiguous structures of the orofacial complex are afflicted with disease or disorder. Since these abilities are essential elements of health living, the status of oral health has a direct impact on the functioning of the individual".*

This quotation is taken from Oral Health for the 21st Century, a document published by the World Health Organisation in 1994. It states the integral importance of oral health to one's general health and well-being.

In industrialised countries dental caries (tooth decay) is the most important oral disease in public health terms. It accounts directly or indirectly for most dental services expenditure and remains the major cause of morbidity and tooth loss. Periodontal disease (gum disease) and occlusal anomalies also represent an important challenge.<sup>(1)</sup> Oral cancer has a high mortality rate and appears to be increasing, but the incidence amounts to a few new cases annually in every 100,000 of the population.<sup>(2)</sup> It is therefore in a different category in that while it is a great deal more serious it is much rarer than the main oral diseases.<sup>(1)</sup> Some of the risk factors (tobacco, diet and alcohol) associated with these oral diseases are also linked to cardiovascular disease (ie, heart disease, strokes and circulatory disorders) and cancer.<sup>(3)</sup> Cardiovascular disease and cancer are two of the three major causes of morbidity and mortality amongst Irish people.<sup>(4)</sup>

The importance of an urgent need for an increased emphasis on oral health promotion and dental health education has already been identified in the Epidemiological Survey of Oral Health of Irish Adults.<sup>(5)</sup> Whilst improvements in oral health are reported<sup>(5, 6, 7)</sup> it is clear that dental disease remains the cause of significant morbidity and suffering for many Irish people.<sup>(5)</sup> There is also evidence that these dental diseases and their effects, as with other diseases, continue to bear most heavily, though by no means exclusively, on the disadvantaged in our society.<sup>(5)</sup> In addition, recent research into behaviour and attitudes has reported on the levels of sub optimal and inconsistent patterns of knowledge about oral diseases and their prevention on the part of the public.<sup>(8, 9)</sup> This in turn can only serve to limit the effectiveness of prevention measures. In addition, groups who generally are without an explicit policy interest but whose activities have a substantial influence on oral health are of importance. The consumer oral hygiene products industry plays an important contributing role in improving oral health<sup>(1, 9, 10)</sup> whilst in contrast the sugar industry's influence can have a negative effect.<sup>(1)</sup>

Modern research has confirmed that dental disease is preventable by simple behaviour changes which may be aided by the application of recent scientific findings. However, the success of preventive measures depends on their availability, as well as on their acceptance and use by individuals, health workers and communities.<sup>(11)</sup> To help ensure that all individuals benefit from preventive measures, careful evaluation and planning of educational and promotional efforts are required.<sup>(12)</sup> Thus there is an educational component requirement to each preventive measure. Health education, by promoting optimal professional and public acceptance and use of known and proven preventive measures, is the corner stone of success.<sup>(11)</sup>

## Remit of the Working Party

Discussions with representatives of the Society of Chief and Principal Dental Surgeons in Ireland during May 1993 and the increasing concerns for the provision of an adequately funded and properly planned national oral health promotion programme led to the establishment of the Working Party (members of the Working Party are given in Appendix A). Simultaneously, the Health Promotion Unit of the Department of Health provided funding to enable the Working Party to access expertise and carry out research and analysis of the dental health education needs of the community dental services. Surveys were carried out between November 1993 and May 1994.

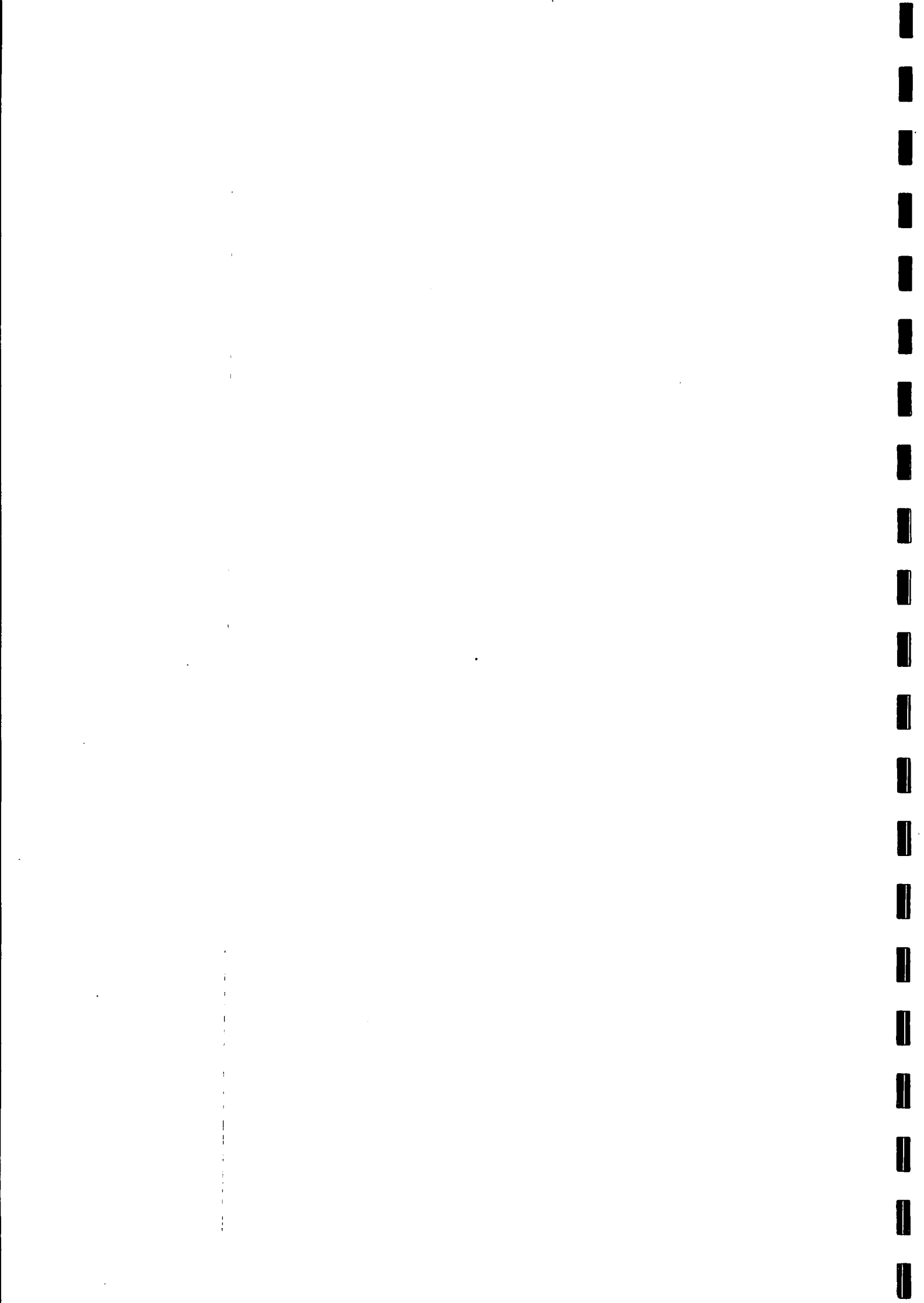
These are as follows:

- The current status of dental health education activities amongst the community dental services.<sup>(13)</sup>
- The provision of dental health education training for the dental team amongst the community dental services.<sup>(14)</sup>
- The current status of qualified dental health educators in the Republic of Ireland in 1994.<sup>(15)</sup>

In addition, an analysis of schools dental health education resource materials<sup>(16)</sup> was carried out.

The Irish Dental Health Foundation supported an evaluation exercise of a dental health education project in the Wicklow area of the Eastern Health Board carried out over a six-month period (January - June 1994).

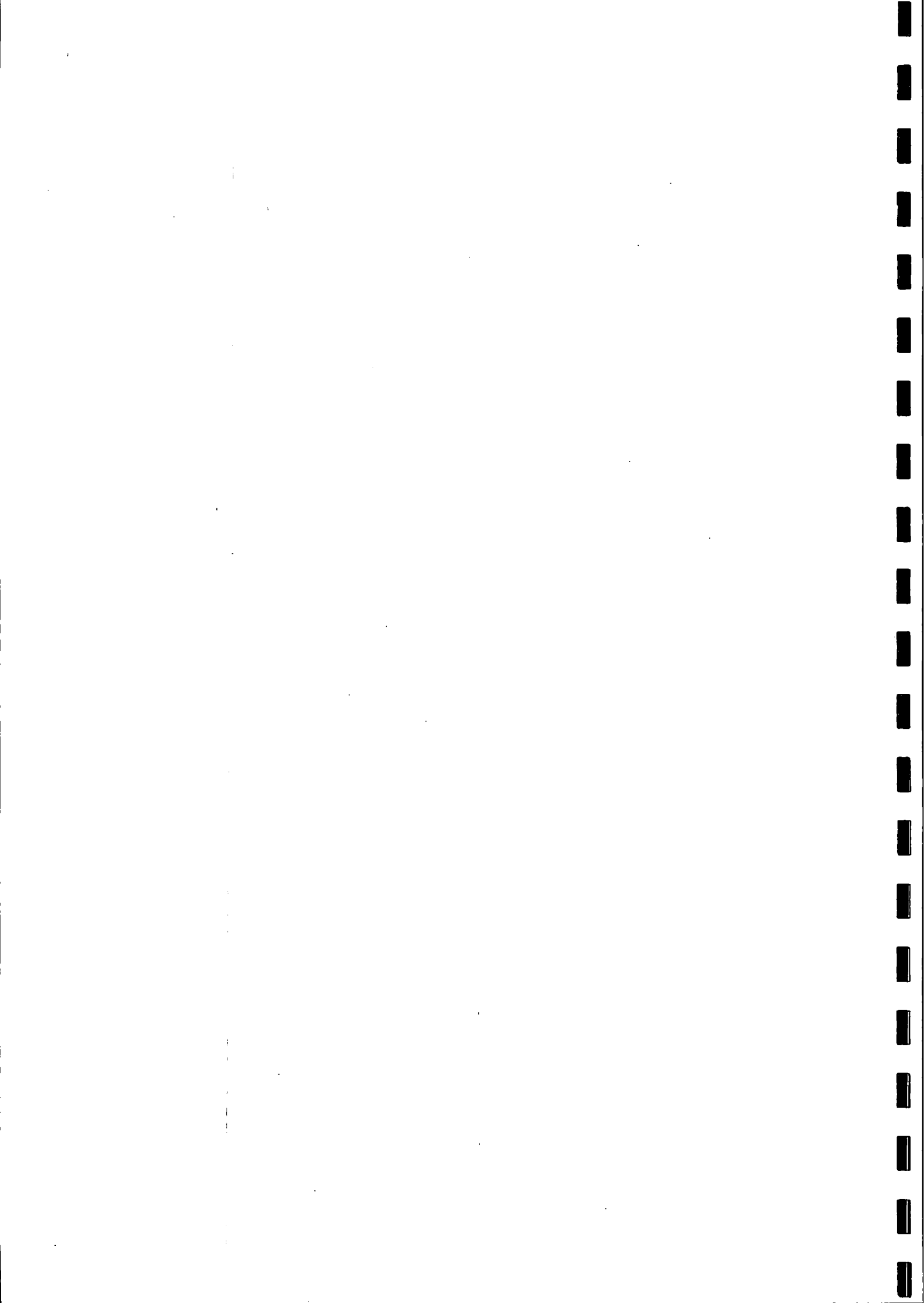
The results of the findings of this research has enabled the Working Party to outline the proposals and recommendations in this document. It is intended as a working document for further development of an overall dental health education plan for the community dental services.



## Towards a Working Document - Stages of Development

<u>April, May 1993</u>	Irish Dental Health Foundation discussions with the Society of Chief and Principal Dental Surgeons in Ireland and officials of the Health Promotion Unit of the Department of Health.
<u>May 1993</u>	Establishment of the Working Party and decisions on its role and function.
<u>June 1993</u>	Funding made available by the Health Promotion Unit of the Department of Health.
<u>September 1993</u>	Working Party meets and agrees areas of research and analysis.
<u>November 1993 - May 1994</u>	Working Party carries out research and analysis between November 1993 and May 1994, including progress reports, consultations and correspondence with other appropriate agencies and personnel.
<u>May - July 1994</u>	Working Party reviews work to date.
<u>August 1994</u>	Final document drawn up in August 1994.

In putting together this report, the Working Party have outlined six main target groups because of the importance of each of these groups (given in Appendix B). Order given does not imply priority of any of these targets.



They are as follows:

- Schools based dental health education:
  - School going children aged between 4 and 16 years
  - Parents
  - Schools in disadvantaged areas
- Ante-natal and post-natal parents
- Those with special needs and their carers
- Older people and their carers
- Workplace
- Health professionals

Finally, the report identifies areas in which urgent action is required.

## Main Findings

The key findings of three surveys are presented in this section of the report. These surveys were conducted between November 1993 and May 1994. The areas researched and analysed are as follows:

- The current status of dental health education activities amongst the community dental services.<sup>(13)</sup>
- The provision of dental health education training for the dental team within the community dental services.<sup>(14)</sup>
- The current status of qualified dental health educators in the Republic of Ireland in 1994.<sup>(15)</sup>

### Policy on Dental Health Education in Individual Health Board Areas.

Whilst some areas have developed policies on dental health education, in general this is not the case at a national level.

### Training in Dental Health Education and Communication Skills for the Dental Team.

With the exception of a few areas, there is a marked absence in the provision of training for members of the dental team. The majority of qualified dental health educators employed by the health boards are not in a position to utilise their skills due to pressure of clinical duties.

There is also an absence of a support system to provide continuing education opportunities, particularly in the areas of current practices and the scientific basis for dental health education.

A significant number of members of the community dental services are becoming increasingly involved in an integrated approach to promoting health. However, they feel disadvantaged without appropriate training in this area.



Funding.

The current level of dental budgets spent on dental health education is **less than 1%**.

Dental Health Education Resource Materials.

Existing school resources in the main are developed by the commercial sector. These are educationally sound but need to be supplemented by other teaching aids and materials.

There is an absence of appropriate dental health education resource materials for second level schools.

Educational resources for other population groups have had a very limited development and therefore are not meeting needs adequately. This is of special importance for risk groups, ie, children and adults with both mental and physical disabilities and the socially disadvantaged.

## Recommendations

The Working Party has drawn up a set of recommendations that can be used as guidelines for the development of a structured and co-ordinated approach to dental health education within the context of the new Health Strategy and more specifically the Dental Health Action Plan.

It is clear from the findings in this report that urgent action in this area is required if optimum **Health Gain and Social Gain** are to be achieved as expressed in the Health Strategy document "Shaping a Healthier Future".

### Structures.

Priority should be given to the formulation of a national policy on dental health education by the Department of Health with an agreed set of national guidelines. These should be reviewed on a regular basis.

Policy at local level needs to be developed by each Principal Dental Surgeon within national guidelines and appropriate to the particular needs of the area.

Dental health educational needs at a local level should be prioritised on a regular basis and suitable programmes implemented to meet these needs.

### Training.

In order to implement dental health education programmes for individuals and groups, training in communication skills for all dental staff should be given priority.

Training programmes should utilise the skills of personnel with an educational background and existing staff trained in dental health education and health education skills should be involved in these training programmes.

Existing trained staff should have access to further training as appropriate and a support network for all those specifically involved in oral health promotion needs to be established.

There needs to be closer collaboration between all health professionals engaged in health promotion to ensure accuracy and uniformity of health messages.

At a local level, trained staff in dental health education should provide updates for other health professionals who require information on dental health.

Dental staff should also be aware of other health promotion programmes and should incorporate aspects of these into programmes as appropriate.

Dental health education programmes for specific target groups should be developed centrally and support provided at a local level for implementation.

Dental health education at the chairside should be carried out by the dental surgery assistant who has had training in basic communication skills and dental health education techniques.

Dental health education for groups should be carried out by staff who have had appropriate training at least to certificate level by a recognised educational body.

#### Integration with Health Education.

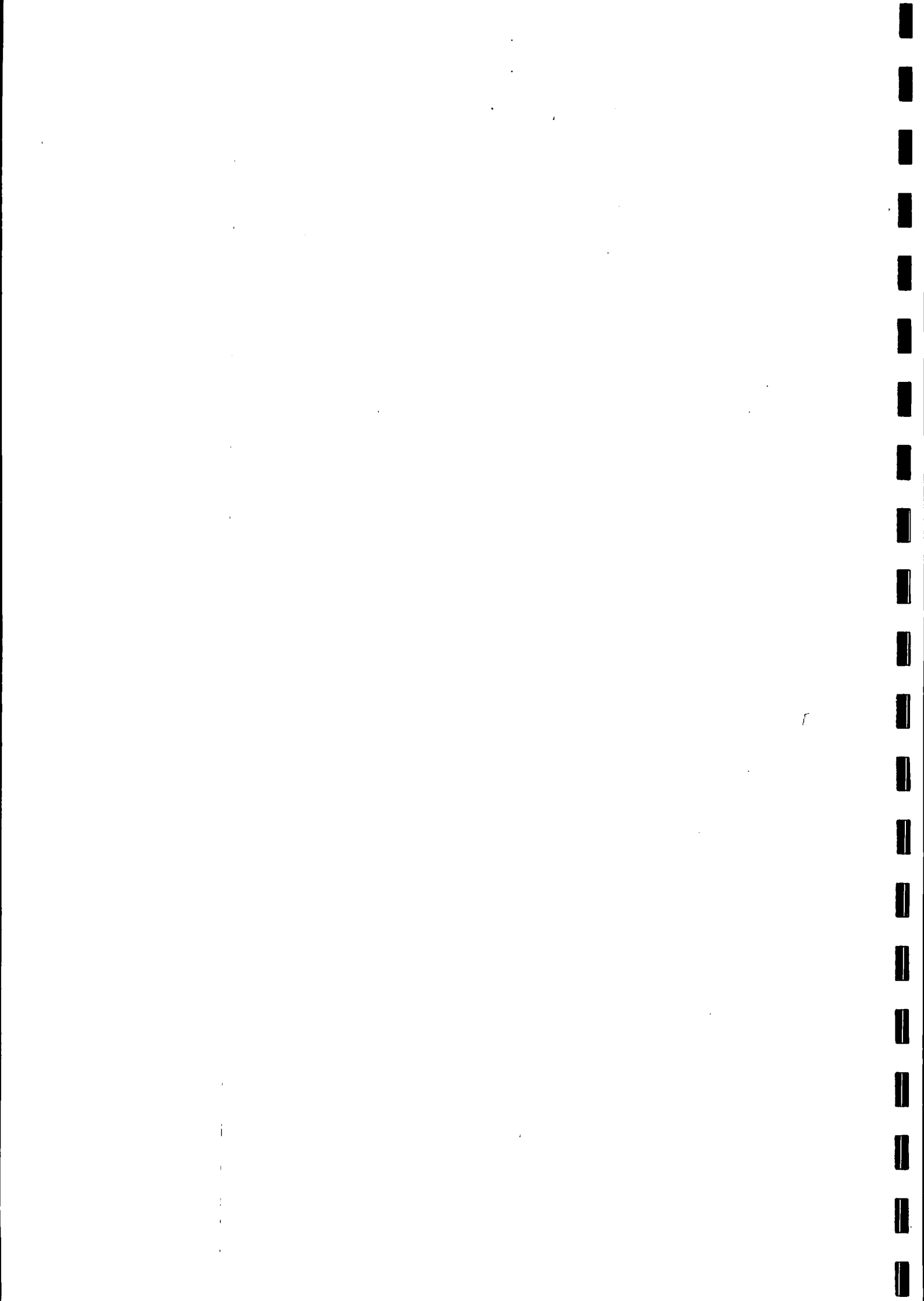
New guidelines need to be developed for the provision of school based dental health education programmes which should integrate with health education programmes being developed for primary and post primary schools by the Department of Education.

Research and Development.

Evaluation of oral health promotion projects should be facilitated by the dental schools in Dublin and Cork and by the Oral Health Services Centre, UCC and supported by the Irish Dental Health Foundation and the Health Promotion Unit in the Department of Health.

Funding.

Adequate funding for an agreed national oral health promotion programme should be established. In addition, specific funding should be clearly identified for health education activities in each health board area.



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## Appendix A



## MEMBERS OF THE WORKING PARTY

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## Appendix B

## TARGET GROUPS FOR HEALTH EDUCATION

The survey results of the dental health education needs identifies 6 main target groups for health education programmes. The aims and objectives are stated as guidelines for health education programmes.

**"Health education needs careful planning if waste is to be reduced and an evaluation of success or failure is to be made. Although no design will account for all the factors that may affect the outcome of a programme it is possible to increase effectiveness by using an appropriate strategy".<sup>(17)</sup>**

The main target groups are as follows:

- Schools based dental health education
  - School going children aged between 4 - 16 years
  - Parents
  - Schools in disadvantaged areas
- Ante-natal and post-natal parents
- Those with special needs and their carers
- Older people and their carers
- Workplace
- Health professionals

## SCHOOLS BASED DENTAL HEALTH EDUCATION

This section on schools dental health education is divided into three areas:

- (a) School going children aged between 4 - 16 years.
- (b) Parents of these school children.
- (c) Schools in disadvantaged areas.

### AIMS OF DENTAL HEALTH EDUCATION IN SCHOOLS

- 1 To promote, develop and co-ordinate dental health education activities in schools.
- 2 To liaise with teachers and school management to provide a specific dental health profile of the students in their school.
- 3 To provide education and support materials for parents and carers of these children.

### OBJECTIVES

- 1 To provide dental health education appropriate to the developmental needs of primary and junior post primary school children throughout the school system.
- 2 To liaise with parents and teachers to promote healthy dental practices.
- 3 To feedback the information collected from screening programmes as a basis for the development of school specific education programmes targeting:
  - (a) Students.
  - (b) Teachers and school management.
  - (c) Parents.

This information could also be used to enhance the programme content itself by:

- (a) highlighting areas of special need;
- (b) providing a means of evaluating the programme;

- (c) facilitating revision or emphasis on selected aspects of the programme as identified during the screening process.

## PARENTS

One of the groups which could greatly benefit from an extended school service would be the parents of these school going children. While information is currently collected on the dental health status of their children, it is not always fed back to the parents.

### AIM

To involve parents and/or carers of school going children in the process of dental health education, utilising their role as primary educators of their children.

### OBJECTIVES

- 1 To seek support and involvement of parents/carers through organised information sessions.
- 2 To educate parents of the potential harmful practices of excessive and frequent sugar consumption.
- 3 To encourage parents to support a school-based policy conducive to sound oral health practices.

## SCHOOLS IN DISADVANTAGED AREAS

These are schools located in areas deemed disadvantaged by the Department of Education.

### AIM

To acknowledge the economic and social pressures which often exacerbate dental problems resulting in poor motivation and a dependence on the system.

### OBJECTIVES

- 1 To provide dental health education appropriate to the needs of this group.
- 2 To develop programmes for students with learning difficulties or who are poorly motivated in dental health education activities using a multi-disciplinary approach.
- 3 To maximise parental involvement by involving parents through health centres, adult education, peer education and school programmes.
- 4 To liaise with the local public health nurse and social welfare officer, school liaison office and other relevant groups to ensure a co-ordinated approach and uniform message.

## ANTE-NATAL AND POST-NATAL PARENTS

Those who are expecting a baby and/or who have an infant and/or toddler in their care.

### AIMS

- 1 To increase the dental knowledge and awareness of parents/carers for themselves and their offspring.
- 2 To promote a healthy dental lifestyle for all the family.

### OBJECTIVES

- 1 To communicate the dental health message utilising the current framework of contact with this group in public health programmes:
  - maternity hospitals
  - ante-natal classes
  - post-natal check-up
  - contact through home visits
  - child developmental clinics
  - community mothers projects
  - national representative association for child minders.
- 2 To ensure that this contact is maintained and the relevant information is continually repeated and reinforced.
- 3 To specifically involve public health nurses as collaborators in delivery of dental health education using their modes of access to mothers and fathers.
- 4 To consider specific ways to impart dental health education to young single parents, male and female.



## THOSE WITH SPECIAL NEEDS AND THEIR CARERS

Those people who are mentally, physically or medically compromised and those socially disadvantaged who thus have special needs.

### AIM

To provide them and their carers with the knowledge, awareness and skills to enable them to maintain a healthy mouth.

### OBJECTIVES

- 1 To make contact with and make available appropriate training for:
  - (a) prospective clients and/or their carers through, for example, general medical practitioners/community physicians; hospital and community clinics; voluntary organisations; residential homes and institutions; special schools/workshops/activity centres, etc.
  - (b) health professionals involved with these people.
- 2 To implement and support dental health programmes.
- 3 To use information from screening programmes to:
  - (a) plan dental health education programmes;
  - (b) evaluate their effectiveness.

## OLDER PEOPLE AND THEIR CARERS

An increasing proportion of people retain a functionally intact dentition throughout life. This must lead to an increased demand for dental care of increasing complexity, with a consequent drain on increasingly scarce resources.

### AIM

To increase awareness of the importance of good oral health and to encourage its maintenance throughout life.

### OBJECTIVES

- 1 To make available appropriate training for:
  - (a) older people and their carers, both at home and in residential care;
  - (b) health professionals involved with older people in areas such as oral cancer and dental care for older people.
- 2 To foster an interest in oral health among older people.
- 3 To provide a point of access for oral care to elderly people and their carers.

## WORKPLACE

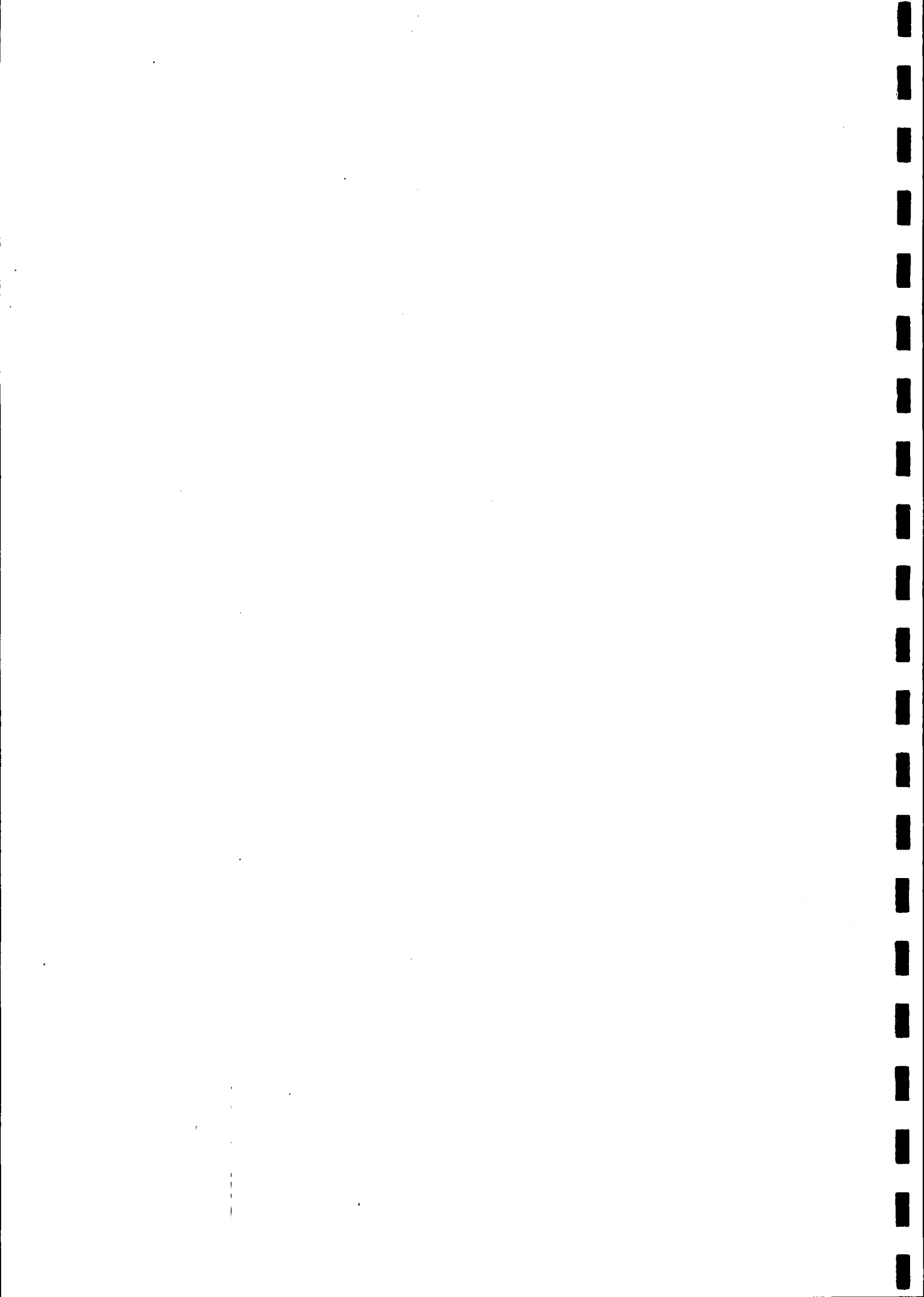
Places of employment are potentially the single-most accessible and efficient site for reaching adults for health education.

### AIMS

- 1 To develop the concept of health promotion in the workplace as a means of promoting oral health within the adult population.
- 2 To encourage wise use of the dental services within the adult population who are currently in employment.
- 3 To increase the value placed on achieving and maintaining dental health throughout life.

### OBJECTIVES

- 1 To develop links with occupational health departments and those involved in health promotion in the workplace.
- 2 To develop programmes suitable for the workplace which would address relevant issues such as the prevention of dental disease and the appropriate use of the dental services.
- 3 To collaborate with agencies responsible for workplace, in service and pre-retirement (health) education.



## HEALTH PROFESSIONALS

All health professionals whose role could include the provision of information or dental health.

### AIM

To encourage and enable health professionals to include effective dental health education in their day-to-day work, as appropriate.

### OBJECTIVES

- 1 To identify and make contact with health professionals.
- 2 To provide appropriate training and support on current dental scientific issues.
- 3 To identify and clarify existing commonalities between oral and general health, such as diet, tobacco use and alcohol.
- 4 To encourage ongoing dialogue between dental and medical professionals.
- 5 To encourage health professionals to educate their clients how to read and interpret the sugar content of products and be aware of the hidden forms of sugar.

# Appendix C

## PERFORMANCE INDICATORS

Source: Northern Ireland Dental Health Education Committee Document:  
"Promoting Dental Health", EHSSB, Northern Ireland.

In these increasingly competitive and materialistic times, those holding budgets, even in Universities and the Health Service, expect and are expected to demonstrate that they have produced something of value as a direct consequence of the money they have spent.

How this is to be done when the money has paid for a lecturer who through his teaching, has revealed the beauty inherent in Shakespeare's sonnets or of the wild flowers in a meadow or the exquisite loveliness of a fox cub, is not easy to understand. Yet all of these are of priceless value and, appreciation of that fact one might argue, is of greater long term worth than a small percentage increase in the number of say, concrete paving blocks produced for the expenditure of the same amount of money by the state.

The problem may be illustrated by some of the comments from "*Health Education and Performance Indicators*".<sup>(1)</sup>

"... it is argued that Performance Indicators pose an inadequate, potentially counter-productive answer to the problem of evaluating complex services.

"The relationship between input, process and outcome is particularly difficult.

Because of emphasis on prevention, as opposed to treatment, results will be reflected in the *long term* in morbidity and mortality statistics".

There are also references to the "complexity of devising performance indicators in view of the different activities and methodologies used in health education".

Those responsible for health budgets find it difficult to express the "value" of money spent on health promotion programmes. It is much easier to produce fine statistics and charts for the number of operations performed and the "throughput" of patients through outpatient clinics and hospital beds.

The process of health education is a complex one requiring receipt of message, understanding, belief in its personal relevance, motivation, decision and action. It is extremely difficult to devise simple measures for such a process.

How then should one evaluate health education and health promotion programmes? Changed behaviour to a healthier lifestyle is an obvious method, but such change does not automatically follow from the acquisition of knowledge, as is shown by the many doctors and nurses who continue to smoke.

In our search for relevant performance indicators suitable for health promotion programmes, we decided to act as if we were the first group to approach this problem. We felt that to take parts of other programmes might unbalance them and in some cases, we disagreed with the practicality and the logic of the recommendations. Our remit was to produce a simple and practical guide for those involved in dental health promotion.

#### AIMS

To look at the role of performance indicators relative to health promotion and to determine if they are able to evaluate such programmes.

Performance indicators are statistical or descriptive units presented in a consistent and systematic way, which attempt to measure the impact and outcome of health promotion programmes.



They are useful at both a professional and managerial level as they:

- (a) provide feedback to help plan strategies and priorities within programmes
- (b) are part of a systematic approach to planning
- (c) validate work practices
- (d) legitimise priorities and strategies
- (e) give credibility to health promotion activities
- (f) are part of the accountability process
- (g) clarify the need for resources

Performance indicators should be valid, appropriate, reliable, simple, cost-effective, comparable and understandable.

They should normally include information on:

INPUT - money, materials, people

PROCESS - different types of activity

IMPACT - immediate effect (intermediate objectives)

OUTCOME - increased health, decreased disease.

It is essential that performance indicators link input and outcome. As outcome may be long-term, both short and long-term changes should be measured.

## PERFORMANCE INDICATORS IN ORAL HEALTH PROMOTION

### **1 MEASURES OF THE PROVISION OF DENTAL HEALTH PROMOTION**

- (a) money spent as a percentage of the dental budget
- (b) the number of health professionals, their grade and the man hours involved
- (c) the number of people receiving the programme
- (d) the categories of people receiving the programme, eg, handicapped, house bound and elderly
- (e) the percentage of those at risk being reached
- (f) the achievement of the target percentage.

### **2 MEASURES OF ATTITUDE AND BEHAVIOUR**

- (a) acceptability of the programme to the target group
- (b) success in increasing knowledge
- (c) success in promoting positive attitudes
- (d) change in behaviour, eg,
  - improved oral hygiene practices
  - healthier dietary practices
  - lowering of age of first dental visit
  - more regular dental attendances
  - appropriate use of fluoride supplements.

### 3 MEASURES OF DENTAL HEALTH

(which are likely to be longer term, ie, 10 years or more)

- (a) mean DMF
- (b) % caries free
- (c) number of teeth extracted because of disease
- (d) number of general anaesthetics for dental treatment
- (e) number of visits to the dentist because of pain
- (f) % wearing dentures
- (g) % with gingival disease
- (h) % with good oral hygiene.

The measures indicated in sections 1 and 3 above are readily obtainable from data which is already being collected and could be collated after simple changes in recording procedures and calibration of the few members of staff in the Community Dental Service who have not attended calibration courses in the Department of Paediatric Dentistry of the Queen's University.

It must be clearly understood that it will not be possible to *prove* that any improvement in dental health is a direct result of a dental health promotion programme since many other factors outside the programme could produce a desirable, or undesirable effect, for example an advertising campaign for a new "miracle" toothpaste which by chance appeared on television over the same period as the programme.

It has been said that measurement of performance in health education is problematical; however, dental health is more easily studied within an economic framework than are many other types of health and health care.<sup>(2)</sup> The implication is that dental health promotion performance should be capable of being measured in more refined units than in other health areas.

If, in the early years, the levels of expenditure and involvement were taken as indicators of performance, it is probable that signs of improved attitudes to dental health and improvement in dental health itself, would become apparent. This working group is confident that the greatest benefits would be seen where active, well planned and continuing dental health promotion programmes were instituted.

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