

Scientific Advisory Committee on Nutrition

**Paper for Information: Government Updates on Nutrition
Related Activities: FSA**

Agenda item 09

Please see attached paper for information.

Nutrition Action Plan Progress Report: Paper to the Board

The Nutrition Action Plan was presented to the FSA Board at the Board meeting on 12 December 2002. The paper is available at:

www.foodstandards.gov.uk/multimedia/pdfs/paperfsa021202.pdf

The minutes are available as from 10 February under the February 2003 section of the website.

RESEARCH

Research Requirements

Issue number 10 was released on 16 January 2003. Proposals are requested by 28 March, and appraisals completed by 30 May. Further information can be found on the FSA website at;

www.foodstandards.gov.uk/science/research/comresearch/RRD/

N02 Diet and Cardiovascular Health:

Research Proposals invited;

- To characterise the dose-response relationship between intake of specific plant foods and vascular function
- To characterise the relationship between dietary lipid intake and metabolic syndrome and CVD risk. This will involve the replacement of dietary saturated fatty acids with monounsaturated fatty acids in relation to varying the total lipid intake. The effect of carbohydrate composition should also be assessed concomitantly.

Following the SACN draft report salt, proposals invited;

- To improve understanding of the effects of habitual salt intake on cardiovascular health in both adults and children
- To improve understanding of the dietary patterns of 'high salt' consumers, using existing data sets. Data from the NDNS Adult Survey 2002 can be made available for this purpose.

N05 Optimal Nutrition

Early Nutrition, later consequences.

Research Proposals invited;

- To use existing samples or data sets to determine the effects of dietary intake and/or dietary patterns in early childhood on subsequent health and well-being, including bone, cognitive health or cardiovascular health.
- To use secondary analysis to determine the possible effects of different levels of folate exposure in foetal life or in childhood on subsequent health would also be welcome.

Bioavailability

Research Proposals Invited;

- To determine the bioavailability of plant foods components from within the food matrix, and investigate interactions between the various components, and/or how these vary in different population groups defined by age, ethnicity, gender and/or genetic factors. Priority will be given to applications that address issues of relevance to existing dietary patterns in these groups.

Cognitive Health;

Proposals are invited;

- To determine the role of foods and/or nutrients in cognitive development or protection from cognitive decline and impairment using functional markers of status (e.g psychomotor development, educational/cognitive function in school children, work capacity and quality of life for adults).

Dietary Surveys and Nutrients in Food

Research Proposals invited to;

- Extract and collate information on portion sizes from the National Diet and Nutrition Surveys of adults aged 19-64 years and people aged 65 years and over and other relevant sources, including manufacturers' data, with a view to inclusion in a revised Food Standards Agency publication on portion sizes for adults.

UPDATE ON CURRENT RESEARCH

Peer education projects

The programme is commissioning two projects to evaluate the efficacy of a peer education approach to encouraging healthy eating.

Written review of the psycho-social basis of food choice

The British Nutrition Foundation have been commissioned to write a review of the evidence on the psycho-social basis of food choice, identifying factors which can be used to influence positive food choices, examples of where positive changes have been achieved and gaps in the evidence base. The project started in January 2003 and is due to complete in April 2004.

Upcoming projects

An N09 requirement is to develop, pilot and evaluate different methods for promoting healthier choices in local shops and supermarkets. Negotiations are in progress for a project involving village shops.

Food choice inequalities

The aim of this programme is to understand the physiological and psychological basis upon which specific target groups of the population make food choices. In particular, to undertake work with minority communities and low-income groups. In addition, the Programme aims to determine the factors that may inhibit sensible dietary choices and how these barriers may be overcome in these target groups.

We are currently commissioning two research projects that aim to develop holistic, culturally appropriate and sustainable approaches to overcome barriers and to promote healthier food choices to girls and young women from populations at risk of low birth weight babies.

Nutrition label testing

The Agency has commissioned research into the ideal content and format of the nutrition label for use by consumers who want to follow healthy eating advice. The research builds on previous research to determine label features that are considered to be useful by the consumer. Fieldwork testing the use of various nutrition label formats during 'real life' situations was carried out during January around the UK. The results are expected to be available in March this year.'

Health claims of food packaging: consumer related qualitative research (September 2002)

The Agency commissioned research into the consumer understanding of health claims following discussions on a draft European Commission proposal for Regulations to control the use of health (and nutrition and functional) claims in food labelling. The Commission's draft proposal identified a number of categories of health claims and

suggested ways in which they might be regulated. Through its research the Agency sought to establish whether consumers differentiate between these different types of claims, in order to inform the debate as to whether these claims should be regulated separately. The Agency's report, which was published on the website in November 2002 and sent to the European Commission, will contribute to the development of ideas for a regulatory regime that takes full account of the need to provide health messages in a form that is understood by consumers.

Commission Directive Proposal: Addition of Vitamins and Mineral to Food

A preliminary draft proposal from the Commission for a regulation on the addition of vitamins and minerals and of certain other substances to foods. The Commission published an informal draft proposal for a Directive relating to the addition of nutrients to foods in June 2000, which was discussed by Member States in September 2000. They have now published this new proposal, which is to be discussed at an expert meeting at the beginning of March. The Agency is intending to begin consulting on this shortly and will use comments received to inform discussions in March.

FSA WORKSHOPS SEMINARS AND REVIEWS

A workshop on folate bioavailability was held on 27 January and workshops will be held on Colonic Health (14 February) and Lipids (3 March). A paper concerning these workshops will be presented to the Committee at the next meeting. A report on the Dietary Survey review on the 14th January '03, will be available at the end of April.

Emerging diet related risk factors for colo-rectal cancer workshop

Chair Professor Joseph Rafter (Karolinska Univ, Sweden)

Presenters:

Professor Ian Johnson (IFR)
Professor John Mathers (Newcastle University)
Professor Stephen Downes (Ulster University)
Professor Fokko Nagengast (Wageningen Centre, The Netherlands) Professor
Sheila Bingham (Dunn Cambridge)
Professor Doug Turnbull (Newcastle University)
Professor Beatrice Pool-Zobel (Jena University Germany)

Folate bioavailability workshop

Chair: Professor Jess Gregory (Florida University, USA)

Presenters:

Dr Ian McDowell (University of Wales Cardiff)
Paul Finglas (IFR)
Professor Helene McNulty (University of Ulster)
Dr Petra Verhoef (Wageningen Centre, The Netherlands)
Professor Pierpaolo Mastroiacovo (Catholic University, Rome)

Dietary lipids and vascular function workshop

Chair: Professor Joe Vita (Boston Univ, USA)

Presenters:

Professor Jill Belch (Dundee University)
Professor Bob Grimble (university of Southampton)
Professor Philip Calder (Southampton University)
Dr David Muller (Institute of Child Health)
Dr Naveed Sattar (Glasgow University)
Margreet Olthof & Nicole de Roos (Wageningen Centre, The Netherlands)

SURVEYS

Low Income Diet and Nutrition Survey (LIDNS)

The feasibility study for the low income survey was undertaken in May and July 2002. The purpose of the feasibility study was to provide a trial run which:

- tested the methodology
- gave an indication of the likely response rates in this particular population.
- trialed the effect of different rewards

As anticipated the feasibility study raised a number of issues that required addressing and the Agency is currently considering the outcomes of the study and its implications for the main stage of the survey.

National Diet and Nutrition Survey (NDNS) adults aged 19-64 years

The first of five reports on the NDNS Adults aged 19-64 was published in early December. The report focused on the types and quantities of foods consumed. Headline findings included:

- On average the adult population in Great Britain are consuming more fruit and vegetables and oily fish but changes in consumption are mainly due to increased consumption by older groups and by women.
- The youngest age group (19-24) had not increased their consumption of fruit and vegetables and ate significantly less than the oldest age group (50-64).
- Consumption of non-alcoholic carbonated drinks has risen significantly. Younger adults now consume on average 6 cans a week.
- Consumption of fruit and vegetables is lower in households in receipt of benefit than in others. 35 % of men and 30% of women in this group ate no fruit during the survey week.
- Overall 13% of men and 15% of women are reaching the target of 5 portions of fruit and vegetables a day.
- On average, oily fish consumption has increased from 34g to 53g a week – a rise from about a quarter of a portion to a third of a portion. This is mainly because women are eating more oily fish

Copies of this report have been ordered for the Committee, reports 2 and 3, which cover macro and micro nutrient intakes, are due for publication in late May/June 2003.

The food acceptability and choice programme has recently been reviewed in line with one of the Arbutnott report recommendations. The review took the form of a written up date on the programme's progress and achievements since the previous review in 1999. A meeting, which included an external reviewer, was held to discuss the paper and make recommendations.

Seminar on Overcoming barriers to dietary change A seminar consisting of presentations of 5 recently completed projects, and workshops to discuss the key issues arising from the research was held on 21 January at Regent's College.

EXPERT GROUP ON VITAMINS AND MINERALS

The Expert Group on Vitamins and Minerals (EVM) will meet in early February 2003 to discuss the comments made during the public consultation.

Over one hundred responses were received to the public consultation on their draft report.

The nutrients that attracted the most responses were vitamins A, B6, C, niacin and beta-carotene.

EVM reviewed the draft report in light of comments received. The Food Standards Agency Board will receive the final report later in 2003. A copy of the final report will be sent to the Scientific Committee on Food (SCF) to inform their deliberations on maximum levels of vitamins and minerals sold as food supplements in line with the EU Directive on food supplements.

Government Updates on Nutrition Related Activities: FSA Wales

Nutrition Strategy for Wales

- In October the Welsh Assembly Cabinet considered and endorsed the draft joint Welsh Assembly Government /Food Standards Agency nutrition action plan. The Minister for Health and Social Services, Jane Hutt, AM, gave a subsequent statement on the plan to Assembly Members in plenary session on 30 October. In her statement she announced it was her intention to launch the final document early in the New Year.
- The written consultation launched on 4 July attracted around 80 responses, many of which have been incorporated into the joint strategy and action plan entitled: ***Food and Well Being - reducing inequality through a nutrition strategy for Wales'***.
- *'Food and Wellbeing'* will reflect a joint Assembly /Food Standards Agency programme of action, making explicit its contribution to the Assembly's health improvement objectives and wider inequalities agenda.
- Jane Hutt ,AM, will officially launch *'Food and Well Being'* at the British Heart Foundation's 'Women's Heart Health' week taking place at the National Botanical Gardens, near Carmarthen on **Thursday 13 February 2003**.

Government Updates on Nutrition Related Activities: FSA Scotland**Nutrient Specifications for Manufactured Products Used in School Meals in Scotland**

As part of the new guidelines for school meals in Hungry for Success, the Food Standards Agency Scotland (FSAS) were asked by the Expert Panel to prepare nutrient specifications for manufactured products used in school meals. Four meetings of an ad hoc working group put together by FSAS took place between August and November 2002. Following these, draft specifications for the fat and sodium content of a variety of products have been produced. FSAS is now consulting with Scottish Local Authorities and their suppliers of manufactured products to assess any implications before finalising the specifications. The Agency in Scotland will be involved in the implementation of Hungry for Success and the targets put in place.

Scientific Advisory Committee on Nutrition

Paper for information: DH Update on Nutrition Initiatives

Agenda item: 9

Please see attached paper for information.

- A. General Update on Nutrition Initiatives
- B. Emerging trends from the Health Survey for England 2001
- C. Five a day pilot initiatives: Executive summary of the pilot initiatives evaluation study

(A) General Update on Nutrition Initiatives

Breastfeeding

- As part of the Government's commitment to reduce health inequalities and increase breastfeeding rates particularly amongst disadvantaged groups, a target has been set to increase breastfeeding initiation rates by 2 percentage every year for three years through the NHS Priorities and Planning Framework (2003-6).
- This years National Breast Awareness Week will be held from 11 – 17 May with a focus on “supporting and encouraging breastfeeding mothers to continue breastfeeding for as long as they choose”. The main objectives are to:
 - “encourage more women to initiate breastfeeding and to continue for as long as possible”
 - “encourage the influencers of breastfeeding women – partners, family and friends to provide active support”.

Healthy Start

The Consultation on proposals to reform the Welfare Food Scheme closed on the 13th December. We have received over 500 responses and approximately 160 people have attended DH active listening events. Responses are currently being assessed and we expect to report the outcome in early March. Proposals include:

- a wider range of foods. This will probably include fruit and vegetables, cereal-based foods, other foods suitable for weaning, as well as liquid milk and infant formula as at present.
- a fixed face voucher to replace the milk token. This voucher will be exchanged for the wider range of foods and will be worth about the same as the existing milk token.
- a new way of registering mothers for the scheme through midwives and health visitors who will provide ‘healthy’ eating and other useful advice. The midwife will register the mother-to-be in Healthy Start, on a similar basis to the Sure Start Maternity Grant.

National School Fruit Scheme

- Following successful piloting of the Scheme, The National School Fruit Scheme is now being extended throughout England on a region by region basis funded by £42m from the New Opportunities Fund. This roll-out started with the West Midlands in summer term 2002, London in autumn term 2002, and will expand to the North West in spring 2003 and East Midlands in summer 2003. Subsequent regions will join at the approximate rate of one per school term. The Scheme

currently reaches 425,000 children in 3,500 schools across the whole of the West Midlands and London.

Food in schools

The Food in Schools Programme is a DH and DfES joint funded venture, to provide a more consistent approach on nutrition and diet for school age children. The Programme is divided into eight projects, following the child through the school day. The projects are: healthier breakfast clubs, healthier tuck shops, healthier vending, water, changing dining room environment (changing rooms), nutritious lunch boxes, out of school cookery clubs, out of school growing/gardening.

The project is currently in the planing and research phase, with implementation beginning nationally in March/April 2003.

The whole programme will be externally evaluated and findings from the work will be disseminated widely to primary and secondary schools. This “best practice” will allow schools to develop their own in-house strategies for improving the nutrition and diet of children.

Five-a-day communications programme

As previously highlighted to Members (SACN October 02), the Five-a-day communications programme - one strand of the Five a day programme - will provide clear and consistent messages about five-a-day including the benefits of eating at least five portions of a variety of fruit and vegetables a day and the amount that constitutes a portion. Fresh, canned, frozen, dried and 100% juice products can all contribute towards five a day. The five a day message should be placed in the context of a healthy, balanced diet.

A 5 A DAY logo has been developed as part of the communications programme, to help people recognise the five-a-day message and introduce consistency in the message in all settings. The logo has been developed following extensive consumer research.

The 5 A DAY logo was launched to industry at a preview meeting on the 19th December. The logo can only be used to promote fruit and vegetable products without added sugar, fat or salt in the first instance. Nutritional criteria have been developed. The logo will be introduced to the public from Spring 2003.

Consumers are likely to start seeing the logo from Spring 2003 - on promotional materials developed by DH for the NHS, on materials developed by voluntary organisations, on promotional materials developed by industry, and on fruit and vegetable products/packs.

In the first instance, the logo will only be able to be used to promote fruit and vegetable products without any added fat, salt or sugars. Strict nutritional criteria have also been established which address issues such as the amount of fruit and vegetables

that a product must contain before it can display the logo. Further consideration needs to be given to the development of nutritional criteria for the use of the logo on products containing added fat, salt and/or sugars, such as pre-prepared meals. While the recommendation to eat more fruit and vegetables is an important one, this needs to be considered in the context of NHS Plan commitment to address the overall balance of the diet, including levels of fat, salt and sugar.

We are establishing a small technical group to aid the development of nutritional criteria for use of the logo on products with added sugar fat and salt. Following initial consideration by the technical group, we will consult more widely.

For more information see www.doh.gov.uk/fiveaday.

Sustainable Food and Farming

The Government's Strategy for Sustainable Farming and Food was published in December 2002 and builds on the new vision set out in the Independent Policy Commission report led by Sir Don Curry. The strategy sets out how industry, government and consumers can work together to secure a profitable and internationally competitive future for the food and farming industries whilst contributing to a better environment, improving nutrition and public health and prosperous communities. The strategy included a commitment to develop a Food and Health Action Plan (see below).

Food and Health Action Plan

In December 2002 the Department of Health announced it is to lead the development of a new cross-government Food and Health Action Plan. The Plan will pull together all of the issues that influence what we eat and will address food production, manufacture and preparation, access to healthier food and providing information for consumers about healthy eating and nutrition. The Plan will address healthy eating at all stages of the life course, and will build on existing work to improve diet and nutrition. Action to deliver the plan will be required at national, local and regional level. The Plan will also be one of the key elements in the Government's Strategy for Sustainable Food and Farming.

Nutrition Forum

The purpose of the Forum would be to bring key stakeholders in nutrition together on a regular basis, to allow an exchange of information and to facilitate communication between stakeholders. The terms of reference of this group is to *'provide a forum for those working towards improvements in diet and nutrition in England through sharing experiences and co-ordinating efforts and actions. The overall purpose will be to improve health.'*

DH and FSA provide joint secretariat for the Forum. The Nutrition Forum has held three meetings to date (March, June and November 2002). Issues discussed at the last

meeting included local action on nutrition and the joint health claims initiative. The minutes of the meetings are at www.doh.gov.uk/nutritionforum/.

Physical Activity

- Work on Local Exercise Action Pilots (LEAP) ongoing. LEAP aims to test out different community approaches to increasing access to physical activity. Partners in the Programme are Sport England, Countryside Agency and Local Government Association. Primary Care Trusts in neighbourhood renewal fund areas were invited to submit expressions of interest and shortlisted PCTs were asked to work up full applications. These have now been received and are being assessed by regional panels. We will announce the nine pilot sites in March 2003.
- Work on the CMO report setting out the health case for physical activity is ongoing. The report will bring together the latest research evidence on physical activity and health. It will be a high level document aimed at those concerned with formulating and implementing policies or programmes that could benefit from the promotion of physical activity, sport, exercise or active transport. The report will be published in Spring 2003.
- We are starting work on the development of a new communications message for the recommended amount of physical activity which will stress the accumulation of 'portions' of activity across the day. This work will form part of a wider communications strategy for physical activity. We are also planning a stakeholders event which will aim to provide an updated overview of DH physical activity strategy and a forum to discuss both the overall direction and individual projects.
- DH is funding a second series of Travel Plan seminars for the NHS in January and February. The seminars are being run by Sustrans and support the milestone in the NSF CHD for green travel plans and the Environmental Strategy for the NHS.

(B) Emerging trends from the Health Survey for England 2001

The Health Survey for England provides a yearly assessment of trends in obesity, activity, and blood pressure. The Survey takes a particular focus each year; CVD is the focus for 2003.

From 2001, more detailed information is being collected on fruit and vegetable consumption. This information is based on survey questions rather than weighed intakes, and is therefore less accurate than the National Diet and Nutrition Survey of adults aged 19-64 (2002). The HSE data is likely to over estimate intakes - a common problem of questionnaires as people are asked to recall how much they consumed. This survey will be useful for assessing trends in intake.

Key results for 2001, published January 2003, are:

Obesity – Body Mass Index (BMI)

- The Health Survey for England shows that the prevalence of obesity (BMI >30) continues to increase and that the prevalence has trebled since 1980. Mean BMI have also increased demonstrating that the increase is across the board and not restricted to those at particular end of the distribution.
- In 2001, 21% of men and 23.5% of women were obese.
- As in previous years, men and women in the age groups 45-54, 55-64 and 65-74 were most likely to be obese. In both males and females, mean BMI and the prevalence of overweight and obesity increases with age, reaching a peak in 65-74 year olds in males and 55-64 year olds in females.
- There has been a particularly steep rise in the prevalence of people classified as grossly obese (BMI > 40), in line with evidence from the US. NICE has concluded that surgery is the recommended treatment option for morbidly obese people. However, at present little over 200 operations are performed annually and many of these are privately funded (NICE 2002).

Mean BMI

BMI	1980*	1993	2000	2001
Males		25.9	26.8	27.0
Females		25.7	26.6	26.7

Males

BMI	1980*	1993	2000	2001
20-25 (normal)		37.8	29.9	28.4
25-30 (overweight)		44.4	44.5	46.6
Over 30 (obese)	6%	13.2	21.0	21.0
Over 40 (%)		0.2	0.6	0.62

morbidly obese)				
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Females

BMI	1980*	1993	2000	2001
20-25 (%)		44.3	39.0	37.6
25-30 (%) overweight)		32.2	33.8	32.9
Over 30 (obese)	8%	16.4	21.4	23.5
Over 40 (%) morbidly obese)		1.4	2.3	2.5

* not HSE data

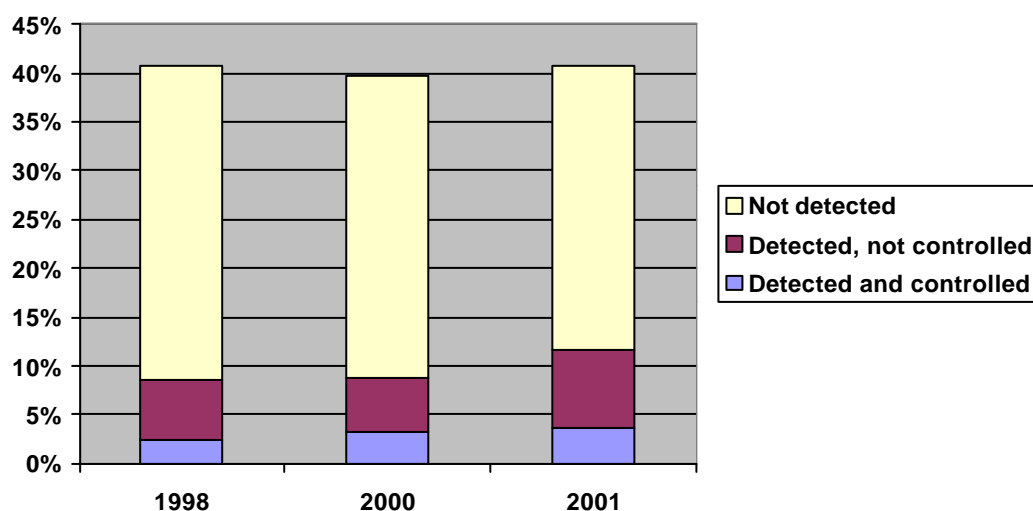
Fruit and vegetable consumption

- A higher proportion of women (28%) than men (24%) consumed the government's recommended level of at least five portions of fruit and vegetables per day.
- The average number of portions of fruit and vegetables eaten per day was 3.7 for women and 3.4 for men.
- The proportion consuming five or more portions a day was lowest among those aged 16-24, and increased with age to a peak among those aged 55-64, after which it decreased. Less than one fifth (17%) of those aged 16-24 ate five or more portions per day compared with one third of adults (33%) aged 55-64.
- Among children aged 5-15, 13% of girls and 14% of boys consumed five or more portions a day, with average numbers of portions of 2.8 for girls and 2.6 for boys.
- The most commonly-consumed category of fruit and vegetables was fresh fruit. Around 6 in 10 adults had eaten fresh fruit on the previous day. The average number of portions of fresh fruit consumed was 1.6 for women and 1.4 for men, compared with about 0.7 for vegetables (the next largest category).
- Among children the picture was the same, with fresh fruit being the most commonly-consumed. Children were less likely than adults to eat vegetables and salad.
- The proportion of adults eating five or more fruit and vegetable portions a day increased steeply as household income increased. The difference between opposite ends of the income scale was greater for women than for men. One fifth (20%) of women in households in the lowest income quintile consumed five or more portions per day compared to nearly two fifths (38%) in the highest.
- Fruit and vegetable consumption had an inverse relationship with cigarette smoking. A much smaller proportion of current smokers than of non-smokers (or ex-smokers) consumed five or more portions a day. This relationship still held once age and socio-economic characteristics were taken into account in the analysis.

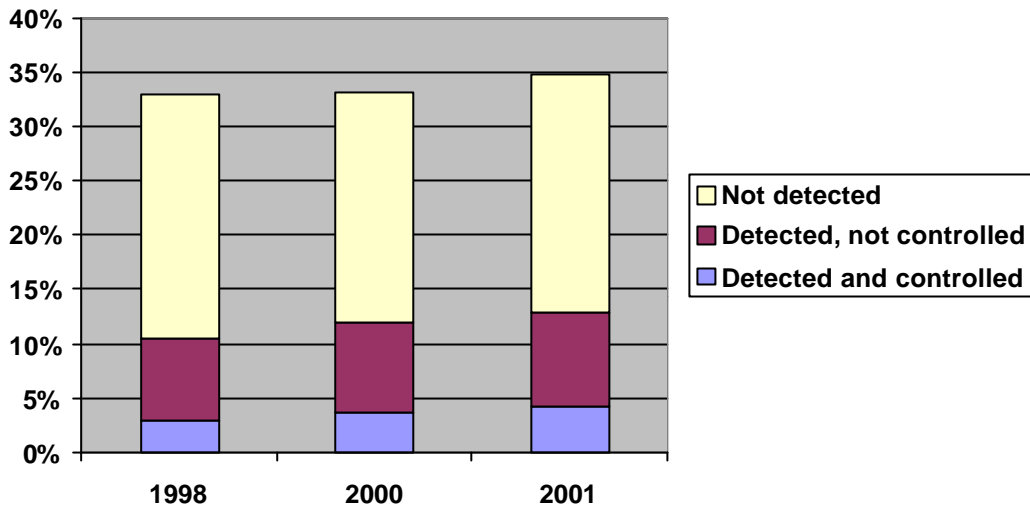
Blood Pressure and Hypertension

- Mean blood pressure is fairly stable.
- The threshold for defining high blood pressure is 140mmHg and/or 90mmHg.
- Between 1998 and 2001 there was a slight increase in the number of hypertensive women (from 33% to 35%) while the proportion of hypertensive men remained at 41%.
- There has been an improvement in both detection and treatment rates, although there is much room for further improvement. The proportion of male hypertensives who are undetected has fallen from 32.3% in 1998 to 29% in 2001, while the proportion of female hypertensives has fallen from 22.5% to 21.9%.
- Likewise, there has been an increase in the number of hypertensives who are successfully treated. Among men this increase from 2.5% of the total population to 3.7%, and in women from 2.9% to 4.1%. This represents an increase of over 40% in the number of hypertensives whose condition is successfully controlled.
- 41% of men and 35% of women have blood pressure over this level.
- Rates of high blood pressure rise with age –20% of men and about 5% of women aged under 25 have high blood pressure, compared with over 70% of those aged over 65.
- Many cases of high blood pressure are undetected or inadequately treated. Using the post-1998 definition of high blood pressure (over 140/90 mmHg) 40.8% of men and 34.7% of women have high blood pressure (Health Survey for England 1998). Of these, 4.1% of women and 3.7% of men have their blood pressure diagnosed and controlled, and 8.8% of women and 8.0% of men have their blood pressure diagnosed but not controlled. While 21.9% of women and 29% of men have blood pressure but are not receiving treatment for it. (see below)

Hypertension in men (1998-2001)



Hypertension in women (1998-2001)



Smoking

Adults

- The percentage of men who were current cigarette smokers decreased from 28% in 2000 to 26% in 2001.
- The proportion of women who were current cigarette smokers was at 25% in both 2000 and 2001.

The trends identified in the HSfE 2001 for smoking prevalence are broadly similar to the findings reported in the 2001 GHS, (which is used to monitor smoking targets) showing marginal decreases in prevalence over recent years.

Children

- Around one in five children aged 8 to 15 had smoked cigarettes (21% of boys and 20% of girls); this is similar to 1993.

The key source for monitoring smoking among young people aged under 16 (e.g. for the Tobacco White Paper target) is the School Survey commissioned by DH.

Alcohol

Adults

- For men, the level of alcohol consumption has remained fairly consistent since 1993. Average weekly alcohol consumption increased from 17.2 units in 1993 to 17.7 units in 2001.
- For women average weekly consumption of alcohol has increased from 6.2 units in 1993 to 7.4 units in 2001.

- The proportion of men drinking 21 or more units of alcohol a week was 30% in 2001, the same as in 1993.
- The proportion of women drinking 14 or more units of alcohol a week increased from 13% in 1993 to 18% in 2001.

No information is included in the trend table on “binge drinking”.

Children

- In 2001, 39% of boys and 33% of girl’s aged 8 to 15 had ever drunk a proper alcoholic drink, similar to levels to 1998.

The key source for monitoring alcohol consumption among young people aged under 16 is the School Survey commissioned by DH.

FIVE-A-DAY PILOT INITIATIVES EXECUTIVE SUMMARY OF THE PILOT INITIATIVES EVALUATION STUDY

KEY FINDINGS

- Community initiatives can produce important changes in people's knowledge, access and intake of fruit and vegetables.
- Over a relatively short period of time, the community initiatives stemmed a fall in fruit and vegetable intakes, against the National trend. This may suggest that a sustained intervention could help to increase consumption.
- Overall, the intervention was found to have had a positive effect in people with the lowest intakes - this is important for addressing inequalities in health.
- Non-smokers were more likely to benefit from initiatives to increase fruit and vegetable consumption than smokers. Reasons for this need to be investigated.
- Frequency of intake was found to be an important determinant of total fruit and vegetable consumption. Low consumers should be advised to eat fruit and vegetables more often.
- Average fruit and vegetable portion sizes, measured in the control group, were similar to the amount commonly assumed to represent one portion (ie 80g).
- The short questionnaire developed for this study provides a simple, practical tool for assessing change in population intakes and can be used to evaluate the effectiveness of other population interventions.

BACKGROUND TO REPORT

Fruit and vegetables on health

Cancer and coronary heart disease account for 60% of all early deaths. A key feature of this Government's prevention strategy to reduce early deaths from cancer and coronary heart disease is action to improve diet and nutrition. The NHS Plan (Department of Health, 2000c), the NHS Cancer Plan (Department of Health, 2000b) and the National Service Framework for Coronary Heart Disease (Department of Health, 2000a) all highlight diet and nutrition as a key area for action. This includes action to increase fruit and vegetable consumption, particularly for people with the lowest intakes, as part of a national Five-a-day programme.

Increasing consumption of fruit and vegetables can significantly reduce the risk of many chronic diseases, including heart disease, stroke and some cancers. Expert bodies, including the World Health Organisation (WHO, 1990) and the UK Committee on Medical Aspects of Food and Nutrition Policy (COMA 1994 and 1998) consistently recommend eating at least five portions of a variety of fruit and vegetables a day (ie at least 400g). Increasing intakes of fruit and vegetables could reduce the risk of deaths from chronic disease such as heart disease, stroke and cancer by up to 20% (Department of Health, 2000c). Despite these recommendations, consumption in England remains low. On average, people consume approximately 3-4 portions of fruit and vegetables a day (based on National Food Survey data). Consumption tends to be lower among children (Gregory et al. 2000), people on low incomes and isolated and marginalised people who lack social support (Office for National Statistics, 2000; Cooper et al., 1999).

Five a day community initiatives

The decisions people make about the food they eat are influenced by a complex set of factors. In the case of fruit and vegetables these include access and availability, and attitudes and awareness. Strategies to increase consumption will need to address these factors.

To assess the feasibility of implementing an area-wide approach to increasing fruit and vegetable consumption, the Department of Health commissioned five community based Five-a-day pilot initiatives. The pilots, targeting one million people across 5 areas in England, aimed to improve access to fruit and vegetables, increase awareness of the health benefits of eating five-a-day, and increase consumption of fruit and vegetables, with a particular emphasis on addressing inequalities. The five areas had a 12-month intervention period, from June 2000 to July 2001.

The pilot initiatives undertook interventions in a variety of settings, including:

- the health service, particularly primary care
- food retailers and farmers' markets
- schools & pre-schools
- workplaces and caterers
- the wider community, including food co-ops and allotments.

Evaluation report

This report outlines the national evaluation of the 5 pilot initiatives and assesses their overall impact on fruit and vegetable consumption. These findings are in addition to the evaluation of the initiatives undertaken locally and will help inform new projects, including those that are being funded by the New Opportunities Fund throughout England from 2002.

This report also describes the assessment of two quick methods for estimating fruit and vegetable intakes. Assessing peoples' diets is difficult. It is therefore important that project teams have access to a short, easy to use questionnaire that will help them evaluate the impact of their work on local intakes of fruit and vegetables.

Further information about the Five-a-day programme and about the five pilot initiatives can be found at www.doh.gov.uk/fiveaday

AIMS OF THE SURVEY

- To assess fruit and vegetable intakes before and after the Five-a-day intervention in each of the 5 pilot sites.
- To assess intakes of fruits and vegetables in a control group which was not exposed to the intervention measures.
- To evaluate, in the control group, two methods for quickly assessing fruit and vegetable intakes and to select one in order to assess the effectiveness of future Five-a-day intervention strategies.

RESEARCH TEAM

This national evaluation was undertaken by the research team for the European Prospective Investigation into Cancer and Nutrition (EPIC) based at the Institute of Public Health, University of Cambridge and led by Professor Sheila Bingham.

ASSESSMENT OF FRUIT AND VEGETABLE INTAKE

Fruit and vegetable intakes were assessed by:

- A questionnaire called - the **Five a Day Community Evaluation Tool (FACET)**), with 9 questions to determine how many portions of fruit and vegetables were eaten during a single day.
- A "food frequency" questionnaire (called **FFQ**) with 49 questions to determine usual intake of fruits and vegetables over one year.
- Additional questions about health beliefs, knowledge, attitudes and access to fruits and vegetables (called **ATTITUDE**).

RESEARCH METHODS

Data Collection

Individuals taking part in the evaluation study were asked to complete the questionnaires on two occasions: before the start of the pilot projects ("baseline") and again after the projects had been up and running for 1 year ("follow-up"). The follow-up also asked questions on awareness of local activities to increase fruit and vegetable consumption and on factors affecting any change in fruit and vegetable intakes. Information on ethnicity, income and smoking were also collected from the individuals in the pilot areas at follow up.

The questionnaires were posted to 1560 adults living in the pilot areas (the "intervention" group) who were randomly selected from local electoral registers. The questionnaires

were also sent to 400 subjects living in another area. These subjects were taking part in a large study to investigate the links between diet and disease (EPIC-Norfolk Study), but had not been advised to change their diet in any way. These subjects formed the "control" group against whom the intervention group would be compared. The large number of people chosen to receive these questionnaires was to help ensure that the researchers could detect at least a half portion change in intakes.

Selection of dietary assessment methods

The data collected at baseline from the control group were used to assess the ability of the FACET and FFQ questionnaires to estimate fruit and vegetable intakes. Average estimates of fruit and vegetable intake using the quick methods were compared to very detailed food diaries available from the control group. For the purpose of this report the food diary will be referred to as the 'REFERENCE' method.

The ability of each rapid dietary assessment method to categorise subjects as "high" consumers (eating more than five portions a day) or "low" consumers (eating less than five portions a day) was also investigated.

Estimates of total fruit and vegetable intake from each of the quick questionnaires were also compared to perceived intakes indicated on the ATTITUDE questionnaire.

RESULTS

Questionnaire evaluation

Estimated intakes

- Estimated intakes based on the FACET questionnaire agreed more closely with the REFERENCE method than the FFQ estimates.
- Both the FFQ and FACET questionnaires tended to overestimate the frequency of fruit and vegetable intake compared with the REFERENCE method. The FACET questionnaire overestimated intakes by about 1.5 portions.
- There was good agreement between how much fruit and vegetables people *thought* they ate and how much they *reported* eating using both the FACET and the FFQ questionnaires.

Classification of intakes

- When classifying participants as "high" or "low" consumers, the FACET questionnaire agreed more closely with the REFERENCE method than the FFQ method.
- Both the FACET questionnaire and REFERENCE method classified 42% of individuals as low consumers and 22% as high consumers. Hence, overall, there was 64% agreement between FACET and REFERENCE methods using this simple classification. This compares with 51% agreement between the FFQ and REFERENCE methods.
- Where the FACET questionnaire and REFERENCE method did not agree, participants were more likely to be incorrectly classified as high rather than low consumers. 28% individuals were incorrectly classified by the FACET as high consumers whereas only 8% individuals were incorrectly classified as low consumers. These results suggest that the FACET questionnaire agreed more closely with the REFERENCE method at lower levels of intake.

Conclusions

The FACET questionnaire provides a better estimate of fruit and vegetable intakes than the FFQ and will be particularly useful for identifying low consumers.

The FACET questionnaire tended to overestimate fruit and vegetable intake, but will provide a useful estimate of *change* in fruit and vegetable intake, and will therefore, be useful for assessing the effectiveness of 5-a-day interventions, particularly in low consumers.

On the basis of these results, the FACET method was selected as the best method for assessing the effectiveness of 5-a-day fruit and vegetable interventions. The results presented in this report are therefore based on the FACET questionnaire.

Portion Size and Serving Frequency

The size of an average serving of fruit and vegetables was determined from the weighed food diary data available from the control group. The relative contribution of portion size and portion frequency to total fruit and vegetable intake was also investigated.

Portion weight

The average weight of a serving of fruit and vegetables in these individuals was 86.2g. This is similar to the 80g portion size estimate which is commonly used and justifies 5-a-day as a means of achieving the recommended minimum intake of 400g/d.

Portion frequency

Portion size and frequency of consumption both influenced total fruit and vegetable intake. Eating frequency appeared to have a greater impact on total fruit and vegetable intake than portion size.

- High consumers of fruit and vegetables (400g or more per day) ate them about 5 times a day whereas low consumers (less than 400g per day) ate them around 3 times per day.
- Average portion sizes of fruit and vegetables were only slightly higher in high consumers of fruit and vegetables (99g males and 90g females) compared to low consumers (85g males and 80g females).

Conclusions

These results suggest that low consumers tend to eat reasonable serving sizes of fruit and vegetables, but they need to eat these foods more often if they are to achieve 5-a-day.

EFFECT OF 5-A-DAY PILOT STRATEGIES: MAIN FINDINGS

The intakes reported below are from the FACET questionnaire and therefore overestimate intakes. The FACET questionnaire overestimated intakes by about 1.5 portions. The important findings are therefore the difference between groups and change in intake pre and post intervention, not absolute intake.

Baseline (pre-intervention)

- Average fruit and vegetable consumption was higher in the control group than the intervention group - by about 1.5 portions per day.
- Average daily fruit and vegetable intake was about 4 portions in the intervention group and about 5.5 portions in the control group. These figures are most likely overestimated by about 1.5 portions.
- Females ate about 1 portion a day more than males, in both the control and intervention groups.
- Current smokers in both intervention and control groups tended to eat around half a portion per day less than non-smokers or ex-smokers.
- In the intervention group, fruit and vegetable intakes increased slightly with age. Intakes in the youngest 20% were 1.3 portions per day less than in the oldest 20% individuals. There was no consistent effect of age on intakes in the control group.

Follow up (post-intervention)

Intake

Overall, the intervention was successful in helping to prevent a fall in fruit and vegetable intakes:

- In the intervention group, there was no change in overall intake of fruits and vegetables.
- In the control group, there was a decline in fruit & vegetable intakes, particularly vegetable intakes (by almost 0.5 of a portion), reflecting national trends (as observed in the National Food Survey).

People in the intervention areas who ate the least at baseline tended to increase their fruit and vegetable intakes whereas people who ate the most at baseline tended to decrease their intakes:

- Those who ate less than 5-a-day at baseline increased intakes over the course of the study by about 1 portion a day.
- Those who ate 5-a-day or more at baseline decreased intakes by about 1 portion a day.
- Similar trends were observed in the control group, but these were generally less extreme than in the intervention group.

Some of these observations may be explained by the commonly observed phenomenon that if something has a high or low initial measurement, when measured a second time it will tend to have become more 'average'.

The major benefit of the pilot strategies was observed in non-smokers:

- Non-smokers in the intervention group maintained fruit and vegetable intakes, whereas non-smokers in the control group significantly decreased intakes by about half a portion per day.
- Current smokers in the intervention groups reduced their fruit and vegetable intakes by about half a portion per day. There were too few smokers in the control group to assess.

Access

At follow up, 35% of people living in the intervention areas reported that their access to fruit and vegetables had improved, compared to only 21% of those living in the control areas.

- People who did not report an increase in access tended to decrease their fruit and vegetable intakes (by about 0.3 portions per day) compared to those who reported increased access. However, this finding was not statistically significant.
- For people who reported that their access had improved, the most common reasons were better quality produce (36%) and greater number of local shops selling fruits and vegetables (25%).

Awareness

Knowledge of the 5-a-day message increased in the intervention group and had a positive influence on fruit and vegetable intakes.

- There was a 17% increase in the proportion of intervention group who correctly reported that 5-a-day was the optimal fruit and vegetable intake level, compared to 8% in the control group.
- In the intervention group people who identified 5-a-day as 'optimal' maintained their baseline fruit and vegetable intake while those who did not identify 5-a-day as 'optimal' decreased their intakes by 0.3 portions per day. In the control group, people who identified 5-a-day as 'optimal' decreased their fruit and vegetable intake less (0.3 portions per day) than who did not identify 5-a-day as 'optimal' (0.8 portions per day).

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Scientific Advisory Committee on Nutrition

Tabled Paper for information: Health Departments Update on Nutrition Initiatives Wales and Scotland

Agenda item: 9

Please see attached paper for information.

Government Updates on Nutrition Related Activities: Update on Nutrition Work in Wales. Welsh Assembly Government

Food and Well Being - Reducing Inequality through a Nutrition Strategy for Wales: Further Information

Following the consultation document on a nutrition strategy for Wales the action plan will be launched by the Minister for Health and Social Services on the 13th February.

Developed by the Food Standards Agency Wales in partnership with the Welsh Assembly Government and other key stakeholders, 'Food and Well Being' outlines the actions required by key players to improve the overall diet of people in Wales. It prioritises those groups who are particularly likely to suffer diet and health inequality. The main priority groups are low income and vulnerable consumers – including the elderly and ethnic minority groups – as well as infants, children and young people, middle-aged men and women of childbearing age.

There are nine recommendations and associated actions, which advocate the use of a system of integrated national and local policies and programmes to educate, inform and eliminate barriers to change. Carrying these forward will be the responsibility of a wide range of organisations, working in partnership towards a common goal.

The action plan particularly focuses on one of the Assembly's key strategic aims of tackling social disadvantage and specifically action to eradicate food poverty.

Local Food Procurement

The Welsh Assembly Government Agriculture Department, Wales Procurement Initiative Team and the WDA Food Directorate are working in partnership to develop the local Welsh food supply to the public sector in Wales. Two pilots have been established to test how to maximise, within legal constraints, procurement from SME's in the food sector. In particular to maximise the procurement of fresh food. Findings from these two pilot projects will be cascaded to all levels of the supply chain. Key players, from the purchasing side (contract managers, buyers etc) to the suppliers (SME's involved in the supply of produce and services) have been invited to a conference on the 26th February.

Scottish Executive Health Department

1. The 'Healthy Living' campaign was launched on 7th January 2003. The campaign began with high profile television advertising in January, designed to build awareness of the campaign and the healthy eating advice line and website. This is supported by 48 sheet posters and extensive PR work. Four different fulfilment packs are being issued : a general pack containing recipe cards and a copy of Eating for Health; a weight management pack; 'singles' pack and 'families' pack. The aim of the campaign is to increase consumer demand for healthier foods and give individuals practical support in changing their diet and the initial response from the food industry as been positive. The campaign is also intended to stimulate the food industry to supply this demand. The campaign forms part of an integrated Health Improvement Plan for Scotland.
2. The review of breakfast club provision on behalf of Scottish Executive, has been completed. The results will enable targeting of further funds to breakfast clubs where the need is greatest. Breakfast Club Grant Scheme of £300K will be announced, along with the results of the review, in February 2003.
3. Following a consultation exercise the final report from the Expert Panel on School Meals is expected to be published in Feb 2003. There has been a very positive response to the consultation. The final report will set out a vision for a revitalised schools meals service and present a number of far-reaching recommendations connecting school meals with the curriculum as a key aspect of health education and health promotion. Nutrient based standards are proposed and detailed mechanisms for monitoring these standards are set out. The final report is substantially unchanged (from the interim report), but seeks to provide further clarity on aspects of the proposals that respondents were seeking.
4. A Vitamin D Working Group report is being completed.
5. SEHD continues to work with other Government Agencies on folic acid fortification. Currently SEHD is in favour of fortification at the level concluded by COMA while recognising the need to reduce any potential morbidity resulting from this measure.
6. The Executive has decided that the issue of thiamine fortification of alcohol beverages should be reviewed further within the context of preventing Wernicke's Encephalopathy, a brain disorder related to thiamine deficiency. As such the matter has been referred to the an ad hoc group on Alcohol Related Brain Damage who are being asked to estimate the prevalence of Wernicke's Encephalopathy in Scotland and review further whether thiamine fortification is likely to be a cost-effective public health intervention in Scotland. Should the group's view be that it could be, the Executive will enter discussions with FSA about progressing the matter including seeking advice from SACN.