



**Paper for information: The Nutritional wellbeing of the UK population – synthesis paper**

**Agenda Item: AOB**

This paper was discussed by members at the last SACN meeting on the 28<sup>th</sup> June 2006. It has since been revised, taking into account comments from Members.

The comments from members are included and can be seen at Annex 2.

**DRAFT****The Nutritional wellbeing of the UK population**

1) This document reports an analysis of the results of the British National Diet and Nutrition Surveys (NDNS). The aim of these nationwide surveys, undertaken at regular intervals across a representative sample of the UK population is to review the dietary adequacy of the UK population and identify specific areas where the population is failing to meet dietary recommendations; to identify any groups specifically at risk from a poor diet; and to suggest recommendations to achieve improvement where sections of the population have been shown to eat a poor diet. Special attention is paid to areas not currently the focus of governmental policy.

2) **This analysis was carried out in two sections:**

**Section 1:** *The nutritional health of the UK population:*

This section brings together the findings on food, macro and micronutrient dietary intakes and status from 6 surveys of different population age groups ranging from children aged 1 ½ years to adults aged 65 years and over.

**Section 2:** *The micronutrient intake of UK adults:*

This section highlights main findings from a detailed analysis of the most recent micronutrient intake data of the adult population that describes the lifestyle, demographic and dietary characteristics associated with both poor and adequate levels of intake.

### **Current dietary recommendations**

- 3) The Committee on Medical Aspects of Food and Nutrition Policy (COMA) was set up in 1964 and was succeeded by Scientific Advisory Committee on Nutrition (SACN), in 2001 to provide government with independent nutrition advice. The dietary targets and guidelines agreed by COMA and SACN are summarised in table 1 (in addition the recommendation for alcohol was provided by the Royal College of Physicians). These targets and guidelines have been set in terms of promoting health and preventing nutrition related chronic disease. The UK wide government initiatives to support these targets and guidelines are summarised in Annex 1.

### **Dietary reference values:**

- 4) COMA set guidance intake figures for food components: For energy, Estimated Average Requirements (EAR) are set at the intake level which is likely to meet the needs of 50% of the population. For fat and carbohydrate (including sugar and fibre), Dietary Reference Values (DRV) are set as proposals for population average intakes. For protein, and vitamins and minerals, Reference Nutrient Intakes (RNI) (Department of Health (DH), 1991) are set at intake levels considered sufficient to meet the requirements of 97.5% of the population. Lower Reference Nutrient Intakes (LRNI) are levels of intake likely to meet the needs of 2.5% of the population. In this report, low intakes are defined as below the LRNI for a given vitamin or mineral (DH, 1991). Adequate intakes refer to intakes of a given vitamin or mineral rising above the LRNI.

### **Nutritional status:**

- 5) Status is a general term used to cover levels of nutrients available in the body, which reflect intakes over the longer term indicating how well nourished individuals are. This is compared to nutrient intakes, which are estimated over shorter periods of time. In this report low status is defined as blood levels falling below a certain threshold (for details of thresholds see main report) which has been set to indicate poor status for a given vitamin or mineral. Adequate status refers to blood levels of a given vitamin or mineral rising above this threshold.

**Table 1: Summary of dietary recommendations, and current intakes reported in 2000/1 NDNS**

Recommendation		Population group	Reason for Recommendation	Current intake <sup>1</sup> / meets recommendations?	
Fruit and vegetables	At least 5 x 80g portions/day (400g) (portion sizes are proportionally lower for children) (DH, 2002).	Adults	Reduce risk of some cancers, cardiovascular disease and many other chronic conditions (DH, 2002).	Mean 2.8 portions/day.	No
Oily fish <sup>2</sup>	At least 1 portion/wk (140g) (SACN, 2004).	Adults	Reduce the risk of cardiovascular disease (SACN, 2004).	Mean 1/3 portion/wk	No
Red and processed meat	Consumption should not rise above 90g/day and high consumers should consider a reduction (DH, 1998).	All red meat consumers	To minimise cancer risk (DH, 1998).	Mean intake of red and processed meat and meat based dishes is 138g/day for men and 79g/day women in 2000/01	Yes <sup>3</sup>
Non-milk extrinsic sugars (NMES)	No more than 11% food energy or about 60g/day <sup>4</sup> (DH, 1991).	All	To reduce incidence of dental caries in the UK (DH, 1991).	Up to 19% food energy across all population groups.	No
Fat	Maximum 35% food energy (DH, 1991).	All	To reduce cardiovascular disease, and reduce energy density of diets (DH, 1991).	Mean intake 35% food energy	Yes
Saturated fat	Maximum 11% food energy (DH, 1991).	All	To reduce cardiovascular disease, and reduce energy density of diets (DH, 1991).	Mean intake 13% food energy	No
Non-starch poly-saccharides	An average intake of 18g/day (DH, 1991).	Adults	To improve gastrointestinal health (DH, 1991).	Mean intake 15.2g/day for men, 12.6g/day women	No
Alcohol	No more than 3-4 units/day <sup>5</sup> . (DH, 2006).	Men aged 18+ years	To minimise the risk of liver disease, cardiovascular disease, cancers, injury from accidents and violence (Royal College of Physicians, 2006).	60% of population exceed daily recommendation	No
	No more than 2-3 units/day. (DH, 2006).	Women aged 18+ years		44% of population exceed daily recommendation	No
Salt (sodium chloride)	No more than 6g/day. (proportionally lower for children according to age) (SACN, 2003).	Adults	To reduce risk of hypertension and cardiovascular disease (SACN, 2003).	Mean intake 9.5g/day	No
Vitamins & minerals	Dietary Reference Values. (DH, 1991).	All	To promote optimum health and prevent deficiency (DH, 1991).	Low intakes for different vitamins and minerals are seen within different age groups, see main findings for details.	Not all
Supplements	Vitamin D if consuming no meat or oily fish (DH, 1998).	Adults aged 65+ years	To reduce the risk of bone ill health (DH, 1998).	Supplement use in institutional older people is lower (mean 7%) than in the free-living group (mean 32%). Older people have low intakes and status for vitamin D.	No
	Vitamins A and D unless obtain adequate A and D from diet and sunlight (DH, 1994).	Children aged 1-5 years.	To ensure adequate intake (DH, 1994).	Children aged 1½-4½ years: 1/5 report supplement use and mean vitamin D intakes are 18% of RNI.	No
Energy intake	EAR for men 2500kcal/day, for women 2000kcal/day	Adults	Reduce the risk of chronic diseases such as cardiovascular disease, some cancers, and type 2 diabetes (DH, 1991).	80-90% of EAR.	Yes
Body weight	Body mass index (BMI) between 18.5 and 25 (DH, 1991).	Adults		66% of men, 53% of women have a BMI above 25.	No

<sup>1</sup> For adults unless stated otherwise. The NDNS programme does not cover children less than 18 months of age, pregnant and lactating women or individuals living in institutions (except for people aged 65+ years). The surveys are designed to be representative of the British population, so ethnic minorities and low-income groups are included, but not in large enough numbers for separate analysis.

<sup>2</sup> SACN encourage consumption of at least 2 portions (140g per portion) of fish per week (at least one of which should be oily). Men, boys and women past childbearing age can consume up to 4 portions and girls and women of child bearing age are advised to consume up to 2 portions of oily fish per week (SACN, 2004).

<sup>3</sup> Consumption figures include non-meat components of meat-based dishes and so are not directly comparable with Coma recommendations.

<sup>4</sup> Energy consumed as food and drink excluding alcohol (DH, 1991)

<sup>5</sup> One unit (8g alcohol) is approximately equivalent to half a pint of beer, lager or cider, a single measure (25ml) of spirits, a small glass (125ml) of wine or a small glass of sherry, port or other fortified wine.

## **Methodology**

- 6) *The nutritional health of the UK population* (section 1) presents a detailed summary of findings from the four surveys in the NDNS programme carried out between 1992 and 2001. Results from the most recent NDNS of adults aged 19-64 years (NDNS 2000/01) are also compared with the 1986/87 Dietary and Nutritional Survey of British Adults aged 16-64 years (Gregory *et al*, 1990). This paper highlights specific diet and nutritional issues according to age, gender, regional and socio-economic differences. The findings from the NDNS surveys 2000/01 and 1986/67 identify changes in the diet and nutritional health of the population over the last fifteen years:
  
- 7) *The micronutrient intake of UK adults* (section 2) reports the further analysis of data from the recent NDNS of adults (2000/01). Three analyses were carried out:
  - (a) Differences in dietary and non-dietary characteristics of those with low intakes/status compared to those with adequate intakes/status. Nutrients where there were sufficient numbers of people to take this analysis forward, included vitamins A, D and B<sub>6</sub>, riboflavin (referred to as vitamin B<sub>2</sub> in main paper), potassium and magnesium.
  - (b) This analysis considered all nutrients for which a relatively high proportion of adults had low intakes (vitamin A, riboflavin, iron, calcium, magnesium, potassium, zinc, iodine) or low biochemical status (vitamins B<sub>1</sub>, B<sub>6</sub> and B<sub>12</sub>, riboflavin vitamins C and D, folate and iron), was recalculated for 5 equally sized groups (i.e. quintiles) of the population determined by increasing intake/status for each nutrient. Differences in dietary and non-dietary characteristics between those with the lowest intakes/status (quintile 1) and those with the highest (quintile 5) were identified.
  - (c) Statistical methods (Principal Component Analysis) were used to characterise different patterns of food consumption and the classification of different groups of individuals with similar dietary characteristics. The non-dietary characteristics of these groups were then investigated.

## **Main findings**

### **Children**

#### **8) Intakes failing to meet recommendations:**

- Fruit and vegetable consumption was below recommendations at 170-190g/day<sup>6</sup> for children aged 4-14 years. 20% of the 4-18 age group did not consume any fruit (excluding fruit juice) during the survey week.
- Non-milk extrinsic sugar (NMES) exceeded recommendations at up to 19% food energy, the main source of which is soft drinks.
- Mean vitamin A intakes fell below the RNI.
- Mean vitamin D intakes from food for children aged under 4 years was only 18% of RNI. 13% of older children aged 11-18 years had low vitamin D status.
- Low iron intakes and low iron status was found in children under 5 years.
- A fifth of children aged 1½-4½ years were reported to be taking supplements, mainly vitamins A, C and D and multivitamins.
- Low intakes of several other minerals including calcium, zinc and iodine were seen in older children.
- Boys and girls aged 15-18 years reported drinking 9 and 7 units of alcohol/week respectively.

### **Adults**

#### **9) Intakes failing to meet recommendations:**

- Fruit and vegetable consumption was below recommendations, average 2.8 portions/day (1.6 portions/day for younger adults aged 19-24 years). Consumption of fruit and vegetables generally increased since the previous survey (0.4 portions/day).
- Oily fish consumption was below recommendations (average 1/3 portion/week). There was evidence of increased consumption since the previous survey in adults aged 50-64 years (0.6 portions/week compared to 0.4 portions week in 1986/87).
- NMES exceeded recommendations at 13.6% food energy for men and 11.9% food energy for women.
- Average salt intake increased from 9g/day in 1986/87 to 9.5g/day, well above the recommended maximum.
- 60% of men and 44% of women exceeded the recommended daily benchmarks for sensible drinking on at least one of the seven reporting days.

#### **10) Intakes meeting recommendations**

- The proportion of food energy derived from fat and saturated decreased since 1986/7 (35% and 13% respectively compared to 40% and 17% respectively in 1986/87), accompanied by a reduction in total and LDL blood cholesterol levels.
- Consumption of red, processed meat and meat-based dishes decreased since 1986/87 (138g/day for men and 79g/day women compared to 155g/day for men and 96g/day women in 1986/87).

---

<sup>6</sup> Not calculated using 5-a-day definition, due to different portion weights for children compared to adults.

**11) Analysis of non-dietary characteristics showed:**

- Adults with low intakes for vitamin A, potassium and magnesium and adults with low riboflavin or vitamin D status were more likely to be smokers, to be living in households in receipt of benefits and to be younger in age.
- Adults with low status for vitamin D were also less physically active compared with those with adequate vitamin D status.

**12) Analysis of dietary characteristics showed:**

- Adults with low nutrient intakes were found to consume less of almost all food groups except savoury snacks and soft drinks (excluding fruit juice).
- Low riboflavin and low vitamin D status were independently associated with lower consumption of fish and fish dishes, and with total fruit and vegetables intake and the intake of fruit alone.
- Low riboflavin status was associated with significantly lower consumption of milk and significantly higher consumption of savoury snacks and soft drinks.

**13) Analysis by quintile showed:**

- Similar dietary patterns to those observed above.
- A higher consumption of sugar, preserves and confectionery in those individuals with low nutrient intake/status.
- Adults with the lowest status for riboflavin, B<sub>12</sub>, vitamin C and folate consumed least breakfast cereals.

**14) Analysis of consumption patterns showed:**

- People in the group with the lowest mean intakes/status for all nutrients (except for iron status) out of the three groups identified were more likely to be smokers, to live in households receiving benefits and to have had the highest consumption of soft drinks, savoury snacks and alcoholic beverages.
- People in the group with the highest mean intakes/status of most nutrients were least likely to be smokers and had the highest consumption of fish and fish dishes, fruits and vegetables and nuts and seeds.
- Adults taking supplements tended to be those with higher intakes of these micronutrients in food.

**People aged 65 years and over****15) Intakes failing to meet recommendations:**

- Fruit and vegetable consumption was below recommendations (3 portions/day in the free-living group) especially for the institutional group (2.1 portions/day).
- Older people, particularly those living in institutions, had low intakes and status for several vitamins and minerals especially iron and vitamin D.
- Supplement use in institutionalised older people was lower (mean 7%) than those living independently in the community (mean 32%).

**16) Socio-economic status**

- Adults and children living in households in receipt of benefits were more likely to have lower intakes of vitamins and minerals and lower fruit and vegetable consumption than compared to the “manual” social class groups.

### 17) **Vitamin & mineral intake and status overview**

- Low dietary intakes and low status were reported for several vitamins and minerals, especially in older children, young adults and older people, particularly older people living in institutions.
- Low vitamin D status was found in most population age groups, notably older children and young adults, and in institutionalised older people.
- Mineral intakes were generally lower in relation to the LRNI and RNI (DH, 1991) than vitamin intakes.
- Intakes of magnesium and potassium were low in all age groups except young children. Low intakes of several other minerals (including calcium, zinc and iodine) were seen in older children and young adults, particularly females.
- Low iron intakes were reported in 16% young children (1½-4½ years), in 47% adolescent girls (11-18 years) and in 41% young women (19-34 years) and in 6% of women over 65 years. Low iron status was also seen in all of these groups as well as older men.

## **Recommendations and Summary**

- 18) The NDNS reports indicate that over the last fifteen years there is evidence of some positive change in the diet of the UK adult population, for example the fall in fat and saturated fat intakes and increase in fruit and vegetable consumption. However, further improvements in the diet of the UK population, in respect to several nutrients, are necessary in order to reduce the increasing risk of nutrition-related ill-health and disease (such as obesity, diabetes, coronary heart disease, stroke, cancer and alcohol dependence) for certain population subgroups.
- 19) Population groups identified as having a high prevalence of low nutrient intake and status were:
- Children
  - Young adults
  - Smokers
  - People in lower socio-economic groups
  - Older people living in institutions
- 20) There are currently several government initiatives seeking to reduce obesity and improve the diet and health of the nation (Annex 1). It is important to note that some of these initiatives have been set up over recent years, after data collection for the recent NDNS survey (2000/1) and would not have captured changes in dietary habits which may have taken place following the introduction of these initiatives.
- 21) Improving the quality of the diets of children and young adults is an important area of investment, especially considering the results of analyses detailed in this report. The rising levels of obesity and prevalence of poor nutrient intakes/status in children and young adults suggests diets consist of foods high in energy and sugar, but low in fruit and vegetables and lacking in a number of vitamins and minerals. This investment includes the promotion of fruit and vegetable consumption, the improved nutritional content of schools meals and reduction in salt intake. The FSA is working to reduce the fat, saturated fat and energy content (including sugar) of many manufactured foods. Investment of time and resource must continue in order to contribute to an improvement in the quality of the UK diets and improved nutritional status of the whole population.

**Those areas already the focus of governmental policy are:****22) Low fruit and vegetable consumption**

- Consumption of fruit and vegetables remains below the recommendation in all age groups and is reflected in poor micronutrient status.
- Low fruit and vegetable consumption was associated with low riboflavin and vitamin D status.

**23) High total/saturated fat**

- The proportion of dietary energy intake derived from fat and saturated fat has decreased since the 1986/87 NDNS survey.
- Mean intakes of total fat are generally close to recommendations in all population groups whilst, intakes of saturated fat exceed recommendations in all groups.

**24) High salt intakes**

- The average intake of salt for adults has increased since 1986/87.

**25) Obesity**

- It would appear that mean energy intakes fell below the EARs in all population groups although the number of obese individuals is increasing. This apparent contradiction is likely to be due to a combination of factors including mis-reporting and the possible overestimation of energy requirements due to a decrease in physical activity. This potential mis-reporting would also affect intakes for other macro and micro nutrients. Further research to characterise the diets of the obese and overweight groups would enable further work to reduce of the prevalence of obesity.

**Key areas failing to meet recommendations for population intakes not currently addressed by specific governmental policies are as follows:****26) Specific “at risk” groups**

- Young adults, older adults living in institutions and people in lower socio-economic groups were identified as having a high prevalence of low nutrient intake and status.

**RECOMENDATION**

- 27) Improved monitoring of specific groups at risk of poor nutritional status, would enable better monitoring of current behaviour. In particular, young adults, a population group which includes pre-conceptual and pregnant young women (who determine the initial nutrition status of future generations), also ethnic minorities and children under 18 months population groups for whom there is currently no national data available. These population groups along with older adults living in institutions and people (especially adults with children) in lower socio-economic groups would benefit from focused health initiatives.

**28) Poor dietary patterns**

- The group with the lowest mean intakes/status for all nutrients (except for iron status) also had the highest consumption of soft drinks, savoury snacks and alcoholic beverages when consumption patterns were examined.
- A higher consumption of sugar, preserves and confectionery was associated with low nutrient intake/status when examined by quintiles.

**RECOMENDATION**

29) Improvements to the quality and variety of the diet would help to address the imbalance in macronutrients (i.e. reduce sugar and saturated fat intake while increasing intake of healthy fats found in oily fish, nuts and seeds etc) and improve dietary fibre intake, as well as improving overall nutrient status.

**30) High sugar rich food consumption.**

- The proportion of energy intake derived from NMES exceeds the recommendation in most age groups, particularly for children and young as well as older adults.
- A higher consumption of sugar, preserves and confectionery was associated with low nutrient intake/status. The analysis of consumption patterns showed that groups with the lowest mean intakes/status for almost all nutrients also had the highest consumption of soft drinks.

**RECOMENDATION**

31) Promotion of diets low in soft drinks and sugary foods would help to reduce sugar intakes. Encouraging the replacement of some soft drinks in the diet with low fat milk particularly for children, could be a viable way of reducing soft drink consumption and sugar intakes while improving riboflavin and calcium intake.

**32) Low intake of non-starch polysaccharides**

- Intake of non-starch polysaccharide was low overall and no groups met the recommendation for adults.

**RECOMENDATION**

33) Further promotion of diets rich in non-starch polysaccharides would help to reduce risk of bowel diseases.

**34) Low fish (especially oily fish) consumption.**

- Mean consumption of oily fish was below the recommended one portion per week in all age groups.
- The group with the highest consumption of fish and fish dishes also had the highest mean intakes/status of most nutrients when consumption patterns were examined.

**RECOMENDATION**

35) Intake of oily fish has increased in certain groups over the past 15 years, but it is still below the recommended level. Continued promotion of fish consumption, particularly oily fish, would help to reduce the risk of cardiovascular disease within the population.

**36) Excessive alcohol consumption**

- A high proportion of men and women exceeded the daily benchmarks for alcohol consumption on at least one of the seven reporting days.
- The group with the lowest mean intakes/status for almost all nutrients out of the three groups had the highest consumption of alcoholic beverages when consumption patterns were examined.

**RECOMENDATION**

- 37) Further action to discourage the drinking of alcohol in excess of recommendation would help to reduce the risk of liver disease and other alcohol-related illness.

**Summary**

- 38) When set in the context of current policy comparison of data from the two NDNS papers indicate that certain aspects of the UK diet require specific attention. In general terms, the promotion of a balanced diet<sup>7</sup> and improvement in the quality and variety of the diet would contribute to optimum health and the prevention of diet-related illness (such as diabetes, coronary heart disease, stroke and cancer). These initiatives should be set in the context of a healthy lifestyle, and should reinforce existing messages to stop smoking, to maintain a healthy body weight and to take part in regular physical activity. These messages should be targeted towards young adults, older adults living in institutions and people in lower socio-economic groups in particular.

---

<sup>7</sup> A balanced diet includes consuming plenty of fruit and vegetables, foods rich in starch and fibre such as bread, cereals and potatoes; consuming moderate amounts of meat, fish, eggs, nuts, beans, pulses, milk and dairy products (choosing reduced fat versions where possible); consuming food and drink high in saturated fat and sugar occasionally and if alcohol is consumed it is consumed sensibly (Balance of Good Health FSA, 2001).

**References**

1. The Balance of Good Health. Information for educators and communicators (2001). Published by the Food Standards Agency in consultation with the Department of Health. (First published by the Health Education Authority in consultation with the Department of Health and the Ministry of Agriculture, Fisheries and Food, and in co-operation with the Welsh Office, Scottish Office Home & Health Department and the Department of Health and Social Security, Northern Ireland).
2. Department of Health. Dietary Reference Values for food Energy and Nutrients in the United Kingdom. (Report on Health and Social Subjects, No. 41). London: HMSO, 1991.
3. Department of Health. Nutritional Aspects of the Development of Cancer. (Report on Health and Social Subjects, No. 48). London: HMSO, 1998.
4. Department of Health. Nutrition and Bone Health: with particular reference to calcium and vitamin D. (Report on Health and Social Subjects, No. 49). London: HMSO, 1998.
5. Department of Health. Weaning and the Weaning Diet. (Report on Health and Social Subjects, No. 45). London: HMSO, 1994.
6. Department of Health [www.dh.gov.uk](http://www.dh.gov.uk)
7. Gregory J, Foster K, Tyler H and Wiseman M. The Dietary and Nutritional Survey of British Adults. HMSO (London: 1990).
8. Gregory J, Lowe S, Bates CJ, Prentice A, Jackson LV, Smithers G, Wenlock R & Farron M. National Diet and Nutrition Survey: young people aged 4 to 18 years. Volume 1: Report of the diet and nutrition survey (2000). TSO (London: 2000).
9. Henderson L, Gregory J, & Swan G. National Diet and Nutrition Survey: adults aged 19 to 64 years. Volume 1: Types and quantities of foods consumed. TSO (London: 2002).
10. Henderson L, Gregory J, Irving K & Swan G. National Diet and Nutrition Survey: adults aged 19 to 64 years. Volume 2: Energy, protein, carbohydrate, fat and alcohol intake. TSO (London: 2003).
11. Henderson L, Irving K, Gregory J, Bates CJ, Prentice A, Perks J, Swan G & Farron M. National Diet and Nutrition Survey: adults aged 19 to 64 years. Volume 3: Vitamin and mineral intake and urinary analytes. TSO (London: 2003).
12. Hoare J, Henderson L, Bates CJ, Prentice A, Birch M, Swan G, Farron M. National Diet and Nutrition Survey: adults aged 19-64 years. Volume 5: Summary report. TSO (London: 2004)
13. Royal College of Physicians. <https://www.rcplondon.ac.uk/healthyliving/alcohol.asp>
14. Ruston D, Hoare J, Henderson L, Gregory J, Bates CJ, Prentice A, Birch M, Swan G & Farron M. National Diet and Nutrition Survey: adults aged 19-64 years. Volume 4: Nutritional Status (anthropometry and blood analytes), blood pressure and physical activity. TSO (London: 2004).
15. Scientific Advisory Committee on Nutrition Advice on Fish Consumption [Online Available: [www.sacn.gov.uk/pdfs/fics\\_sacn\\_advice\\_fish.pdf](http://www.sacn.gov.uk/pdfs/fics_sacn_advice_fish.pdf) 2004]
16. Scientific Advisory Committee on Nutrition Salt and Health [Online] Available: [http://www.sacn.gov.uk/pdfs/sacn\\_salt\\_final.pdf](http://www.sacn.gov.uk/pdfs/sacn_salt_final.pdf) 2003

**ANNEX 1****Government policies and initiatives on nutrition****UK**

Saving Lives: Our Healthier Nation the Department of Health White Paper (1999) set out an initial action plan to tackle poor health by improvement in the life of each member of the UK population by reduction of dietary-related diseases (such as cancer, coronary heart disease and stroke). The Food Standards Agency's (FSA) Strategic Plan 2005-10 sets detailed objectives related to diet and nutrition in the UK to make it easier for consumers to choose a healthier diet.

**England**

Choosing Health (DH, 2004) set out government priorities and strategies to improve the diet and health of the English population.

**Scotland**

The Scottish Diet Action Plan (Scottish Office Department of Health, 1996) provides a framework of action to improve diet and make progress towards achieving dietary targets. The Plan and has been the central focus for diet and nutrition policy in Scotland since 1996. FSA Scotland's strategic targets were aligned with the objectives of the Scottish Diet Action Plan and with "Eating for Health-Meeting the Challenge" (Scottish Executive, 2004)<sup>8</sup>.

**Wales**

Food and Wellbeing (FSA Wales, 2003) the nutrition strategy for Wales developed by FSA Wales, the Welsh Assembly Government and other key stakeholders. This focuses on measures to reduce food poverty and on the promotion of food equality with emphasis on the low income group, ethnic minority groups, infants, children, young adults and adults aged 65 years and over.

**Northern Ireland**

Nutrition is a priority area in the Northern Ireland Executive Public Health Programme Investing for Health (2002). The Childhood Obesity Task Force Report, Fit Futures was published in March (2006) and provides policy context for much of FSA Northern Ireland's current commitments.

**Main government driven initiatives in progress**

**Fruit and Vegetables.** The 5 A DAY logo on food packaging is used to encourage the population of England to increase fruit and vegetable consumption. (DH, 2002) and is supported by The School Fruit and Vegetable Scheme. All four to six year old children in Local Education Authority (LEA)-maintained infant, primary and special schools in England are entitled to a free piece of fruit or vegetable on each school-day (DH, 2004). Similar schemes have been established in Scotland, Wales and Northern Ireland.

**Labelling.** FSA is committed to help consumers make healthier choices by improving information and understanding and by encouraging them to take action themselves

---

<sup>8</sup> Which highlights actions for improving health of the Scottish public and was part of the Scottish Executive Health Department's Improving Health in Scotland: The Challenge (Scottish Executive, 2003)

(FSA Strategic Plan, 2005-10). As part of this commitment the Agency has recommended a voluntary “front of pack” traffic light signposting scheme to increase consumer awareness of the nutritional quality of manufactured foods (FSA, 2006).

**Food Promotion.** The Office of Communications (Ofcom) proposes to restrict television food advertising aimed at children. (Ofcom, 2006).

**Salt.** The FSA promotional Salt Campaign (FSA, 2004) is supported by work to establish targets for industry to reduce salt in processed foods, using a model of sources of salt in the diet based on National Diet and Nutrition Survey (NDNS) data (FSA, 2003).

**Schools.** National Assembly for Wales launched the Welsh network of Healthy Schools Schemes 1999, which has encouraged schools to consider action on food and nutrition (such as fruit tuck shops and breakfast clubs). The National Healthy Schools programme encompasses minimum nutrition standards for food in schools in England set by the Department for Education and Skills (DfES), which are to be compulsory from September 2006 (DfES, 2006). Supported by the UK wide Target Nutrient Specifications (TNS) for manufactured foods (FSA, 2006), which replaced and were based on the TNS (FSA Scotland, 2003) developed to meet the nutrient standards launched as part of The Scottish Executive’s Hungry for Success initiative.

**Young Adults.** FSA Wales launched Get Cooking (FSA Wales, 2005) a toolkit for teaching basic cooking skills in a community setting to young people aged 14-25. FSA Wales also published “Healthy Nosh for Less Dosh” (FSA Wales, 2005) to provide healthy eating advice for those on a budget, especially suitable for students. Similarly, Scotland has published “1<sup>st</sup> Time Self-Caterers” as an aid to students and others in a new situation of having to cook for themselves (FSA Scotland, 2005). FSA have joined forces with the popular teen magazine “Sugar” to promote the importance of healthy eating to young adults, including work with “Eatwell” (FSA, 2006).

Women and Children. “Healthy Start” is an NHS initiative, which has been set up initially in Devon and Cornwall, but is planned to launch nationally before the end of 2006. The scheme offers free vouchers every week to pregnant women or mothers with young children in population groups considered as nutritionally vulnerable, which can be swapped for milk, fresh fruit, fresh vegetables and infant formula milk.

**Older Adults.** FSA Wales are committed to providing support to older adults and have published “Eat Well- a guide to healthier eating in over-60s”. “Stock up your Store cupboard” was published as part of “Keep well this winter” campaign (FSA Wales, 2005).

**Recognition of Local Community Initiatives** Food Standards Agency Wales set up the Annual Awards for Food Action Locally (AFAL) scheme to recognise individual or team contributions to local nutrition initiatives, which have had a positive impact on the diet or eating habits of residents in the communities where they work (FSA Wales, 2003). FSA Wales also published details of funding for initiatives on Nutrition and Diet as a resource for groups working on community projects and initiatives to improve diet and health and to reduce inequalities in Wales.

**Vitamins and Minerals.** FSA strategic plan 2005-10 set out aims to seek expert advice on the health implications of low vitamin and mineral (nutrient) intakes in

some population groups, the results of which are detailed in the two papers summarised in this report.

## References

1. Department for Education and Skills [www.dfes.gov.uk](http://www.dfes.gov.uk)
2. Department of Health Choosing Health White paper [Online] Available [http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT\\_ID=4094550&chk=aN5Cor](http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4094550&chk=aN5Cor) 2004
3. Department of Health. Saving Lives: Our Healthier Nation White Paper [Online] Available <http://www.archive.official-documents.co.uk/document/cm43/4386/4386.htm> 1999.
4. Department of Health Social Services and Public Safety Northern Ireland: Childhood Obesity Task Force Report, Fit Futures <http://www.dhsspsni.gov.uk/ifh-fitfutures.pdf>
5. Food Standards Agency (FSA), FSA Scotland, FSA Wales, FSA Northern Ireland [www.food.gov.uk](http://www.food.gov.uk), [www.eatwell.gov.uk](http://www.eatwell.gov.uk)
6. Food Standards Agency Wales. Food and Wellbeing Nutrition strategy for Wales. [Online] Available: [www.food.gov.uk](http://www.food.gov.uk), 2003
7. Food Standards Agency Putting Consumers First Strategic Plan 2005-2010. [Online] Available: [www.food.gov.uk](http://www.food.gov.uk)
8. Northern Ireland Executive Public Health Programme Investing for Health <http://www.investingforhealthni.gov.uk> 2002
9. Office of Communications [www.ofcom.co.uk](http://www.ofcom.co.uk)
10. Scottish Office Department of Health Eating for health: A diet Action Plan for Scotland, HMSO, Edinburgh [Online] Available: <http://www.scotland.gov.uk> 1996
11. Scottish Executive. Improving health in Scotland: The Challenge, [Online] Available: <http://www.scotland.gov.uk/publications> 2003
12. Scottish Executive. Eating for Health: meeting the Challenge. [Online] Available: <http://www.scotland.gov.uk/publications> 2004

ANNEX 2

## Comments from SACN on NDNS summary report submitted August 2006

Member	Comment	Amended	Comment
Annie Anderson	<b>Table 1:</b> Insert intake figures into table 1.	Yes	
	<b>Table 1:</b> Insert (90g) figure for meat recommendation into table 1.	Yes	Exact figures not comparable explanation inserted in footnote
	<b>Alcohol:</b> Amend alcohol units to state "small or 125ml glass of wine"	Yes	
	<b>Alcohol:</b> Pg 3. Are alcohol figures for children figures per week?	Yes	
	<b>Fruit and Vegetables:</b> Only fruit consumption has increased since last survey, not vegetables.	No	Although intake figures for fruit have increased more than vegetables, consistency with main report, and 5 a day recommendation has been kept.
	<b>NMES:</b> Pg 4, mention high levels of NMES in adults and pg 8 high sugar rich consumption in adults	Yes	
	<b>Obesity:</b> Pg 7, include sentence on obesity "it would appear that mean energy ..."	Yes	
	<b>Fruit and Vegetables:</b> 5 a day just in England not UK wide.	Yes	
Christine Gratus	<b>Labelling:</b> Insert "Traffic light" into sentence on front of pack labelling.	Yes	
	<b>Recommendations:</b> Summary and recommendations and beginning of report.	No*	For flow of the document this section was left at the end.
	<b>Oily fish:</b> Rising above being told oily fish is beneficial, but also toxic.	No	Recommendations for oily fish consumption are based on SACN advice, which balanced toxicological risks and heart health benefits
	<b>Recommendations:</b> Remove final recommendation	No*	Other members disagreed
John Cummings	<b>Recommendations:</b> Target message particularly towards parents in lower income groups, as a way of targeting children.	Yes	
	<b>Recommendations:</b> Keep final recommendation.	Yes	
Tony Williams	<b>COMA:</b> Start date 1964	Yes	
	<b>Text:</b> General tracked text changes, especially table 1.	Yes	Except for amendment to 10% dietary energy. To maintain consistency with main report 11% food energy was used.
	<b>Current policy:</b> NDNS should be set in historical context when referring to current policies and effects of policies might not be picked up in 2000/1 NDNS data.	Yes	
	<b>Recommendations:</b> Recommend monitoring of "at risk groups" especially preconceptional and pregnant women, ethnic minorities and children under 18 months old	Yes	
	<b>Current policy:</b> Mention "Healthy Start"	Yes	
Ian McDonald	<b>Status:</b> Define status and use consistent terminology.	Yes	
	<b>COMA:</b> Check COMA start date	Yes	
	<b>Fruit and Vegetables:</b> Amend 400g/d fruit and vegetable recommendation for children.	Yes	
	<b>Obesity:</b> Insert sentence on potential misreporting of	Yes	

	other nutrients.		
Peter Aggett	<b>Presentation:</b> Refinement to report depends on objective of paper, influence presentation of action points and prioritisation.	*	
Christine Williams	<b>Main paper:</b> Put dietary, biochemical and anthropometric data in one report to validate one another.	No	An issue for the main paper- which only assessed dietary and biochemical data
	<b>“At risk” groups:</b> Emphasise “at risk groups” especially in relation to malnutrition in the presence of excess energy in young adults	Yes	
Anita Thomas	<b>Text:</b> General tracked changes in text	Yes	
	<b>Salt:</b> Refer to sodium chloride instead of salt	Yes	Sodium chloride inserted in brackets
	<b>Alcohol:</b> Amend alcohol units	Yes	
Paul Haggarty	<b>Table 1:</b> Explain fibre recommendation for children	Yes	
	<b>Table 1:</b> The ‘Reasons for Recommendation’ in relation to alcohol and vitamins & minerals do not appear to make grammatical sense.	Yes	
	<b>Table 1:</b> On the last line; the recommendation relates to BMI therefore there may be a case for also using BMI in the first column.	Yes	
	<b>Headings and Structure:</b> Present results by population group rather than split into two sections).	Yes	
	<b>Ambiguous language:</b> Amend phrases such as “patterns of low intakes”, “a proportion of children etc.”	Yes	
	<b>Status:</b> Define low or adequate status; Table 1 lists the benchmarks against which the dietary data is assessed. It would be useful to also have a Table 2 which defines the benchmarks used for status.	Yes	Defined status, but referred to main report for thresholds, considered too detailed and complex for summary paper.
	<b>Dietary characteristics:</b> Reword statements which seem to be circular or stating the obvious.	Yes	Changes made, although the analysis was investigating dietary characteristics and these were the results found and some do state the obvious.
	<b>Inconsistencies:</b> eg Work fat intakes are at recommended levels, but on fat reduction must continue.	Yes	Reworded
	<b>Red meat:</b> Include magnitude of change in consumption.	Yes	
<b>Statistical methods:</b> Include methods used.	Yes	Inserted “PCA”	
Ann Prentice	<b>Positives:</b> Emphasize positives as well as negatives and separate out positive and negative findings.	Yes	
	<b>Recommendations:</b> Amend to be more scientific and less policy or risk management orientated. Or remove some altogether.	Yes	Rephrased.
	<b>Recommendations:</b> Amend "...and not currently of priority for governmental policy" as it implies the government has considered areas and dismissed them.	Yes	
Peter Kopelman	<b>Recommendations:</b> Remove risk management action statements.	Yes	
	<b>Recommendations:</b> Set recommendations in context of changing disease prevalence	Yes	Added "...in order to reduce the increasing risk of nutrition-related ill-health and disease..."

\* Comments that may benefit from further discussion.