

## **Nutrition Forum**

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### **PAPER NF 05/28**

#### **Food and Health Problem Analysis**

##### **Members are invited to:**

1. note this draft paper
2. comment on the problem analysis, in particular if the analysis is accurate and appropriate and if not where are the gaps and suggest potential solutions
3. follow this up in writing, following input from other colleagues, by mid August.
4. note this paper will be presented to meetings of the food industry, consumers and health professionals over June and July.

**June 2003**

# FOOD AND HEALTH PROBLEM ANALYSIS

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## Introduction

### Background and rationale

1. 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.
2. Sir Don Curry's report emphasised the impact of the farming and food industries upon health and nutrition and included the following recommendation.

*"The Department of Health, the FSA and DEFRA should come together to produce a strategy on all aspects of encouraging healthy eating, in consultation with academic and medical experts. In particular, primary care trusts as part of local strategic partnerships should ensure that a food dimension is included in health improvements and community plans, which should include monitoring of food and health inequalities."*

3. The Government published its *Strategy for Sustainable Farming and Food: Facing the Future* in December 2002, building on the broad themes identified by the Policy Commission. It also published its response to each of the Policy Commission's recommendations. The response to the above recommendation was

*"The Government accepts the need for co-ordinated action and strong stakeholder involvement in the promotion of healthy eating at national and local level."*

*A new cross Government food and health action plan will build on the work Government is already doing to improve diet and nutrition, including through partnerships with industry and consumers on the 5 A DAY programme. The action plan will address healthy eating at every stage of the life course. Delivery will require action by all sections of the food chain at a national, regional and local level. We agree that primary care trusts and local authorities, working through local strategic partnerships, will have a key role. Schools too have an important role in encouraging pupils to understand the importance of a healthy diet and physical exercise."*

*A cross-government steering group, chaired by the Deputy Chief Medical Officer, and drawn from the Department of Health, the FSA, DEFRA, DfES, Cabinet Office and others has been established to oversee the development and publication*

*of the Food and Health Action Plan.*

*The Government will also ensure that its policy on reform of the CAP (see Recommendation 1 above) is informed by analysis of the health impacts of agriculture expenditure."*

### **Steering Group**

4. DH have established a cross Departmental Steering Group to oversee the development of the Food and Health Action Plan, together with a parallel working group comprising members of the same Departments. The Steering Group met for the first time on 30 January and was chaired by Dr Pat Troop, Deputy Chief Medical Officer. The following Departments have been invited to sit on the Steering Group: DEFRA, FSA, Cabinet Office, ODPM, SEU, DfT, NRU, DfES, Home Office, DCMS, DTI.

5. Following the appointment of Dr Pat Troop to the Health Protection Agency, the CMO, Sir Liam Donaldson will take over the role of chair on an interim basis. The next Steering Group meeting is being arranged for early July.

6. Its role is to:

- oversee the development of the Food and Health Action Plan
- consider the existing policies and activities of Government and others which have an impact on nutrition
- based on an analysis of the current situation, agree policy objectives for inclusion in the Action Plan

### **Aims and Objectives**

7. The Food and Health Action Plan will be a comprehensive and clear statement of Government policy, activities and intent for bringing about a healthier diet for the people of England. The Plan will need to:

- Set out the analysis of the current problems related to food and health, including the burden of diet related disease and patterns of current consumer behaviour
- Set out a comprehensive description of existing and planned work on nutrition with commitments to clear policy objectives, at national, regional and local level, including any new directions or activities, based on the problem analysis, and arrangements for the future co-ordination of nutrition work across Government.
- Address not only those policies where nutrition is the key aim, but policies across Government, particularly those related to the Sustainable Farming

and Food Strategy, which have a significant impact upon diet, working to ensure the impact is a positive one.

- Adopt a life course approach targeting solutions appropriate to the needs, preferences and circumstances of people at each stage of life and address, as a priority, the needs of those groups most at risk of diet related ill-health, such as those on low incomes and include people themselves in the solutions.
- Attempt to secure commitments to action by bodies outside Government, including industry.
- Take into account the international context and UK responsibilities within the EU, and WHO.

### **Link with Sustainable Food and Farming delivery plan**

8. Sir Don Curry leads an Implementation Group to oversee delivery of the Sustainable Farming and Food Strategy. Its role is to drive and oversee change in the farming and food sectors through the implementation of the strategy within DEFRA, and with other Government Departments and Industry.

9. The membership of the Group is:

- Sir Donald Curry (Chair) – Directly reports to the Secretary of State
- Anna Bradley - Financial Services Authority
- Sir Peter Davis - Sainsbury's
- Sylvia Jay - Food and Drink Federation
- Richard Macdonald - National Farmers' Union
- Jeremy Pope - South West Regional Development Agency
- Rosemary Radcliffe - Economist and Complaints Commissioner
- Christine Tacon - Farmcare
- Graham Wynne - RSPB
- Lord Whitty (Parliamentary Under Secretary) and Hazel Blears (Parliamentary under Secretary of State for Health) attend as observers

10. The Group will meet monthly, its role and arrangements for overseeing delivery will be reviewed at the end of 2003.

11. The Department of Health is responsible for one of the ten work strands (consumer health needs) into which the SFF strategy is divided. The FAHAP is the key deliverable of this work strand.

12. A sub group of the Strategy Implementation Group has been established to advise on and oversee implementation of the Consumer Health Needs workstream.

13. Membership of the Implementation sub group for Consumer Health Needs is:

- Sir Donald Curry (Chair) – Directly reports to the Secretary of State
- Anna Bradley - Financial Services Authority
- Sylvia Jay - Food and Drink Federation
- Yve Buckland – Health Development Agency

## CHAPTER 1

### FOOD AND HEALTH IN CONTEXT: AN OVERVIEW OF POLICIES AND INITIATIVES

- *There are a large number of policies and initiatives connected to food and health*
- *Because of the wide range of influences on food and health, it is particularly important that policies and initiatives are focused on common objectives*

#### Health goals

14. Action across Government to improve diet and nutrition is guided by a comprehensive set of policy objectives. Saving Lives (published in July 1999) set targets for England to:

- reduce the death rate from cancer among people under 75 by 20% by 2010
- reduce the death rate from coronary heart disease and stroke among people under 75 by at least 40% by 2010.

15. The NHS Plan identified improvements in diet and nutrition as a central component of the Government's strategy to prevent deaths from heart disease and cancers. Government's approach recognises that people make their own choices about what to eat.

16. The Government has established national health inequalities targets to narrow the health gap between socio-economic groups and between deprived areas and the rest of the country. The targets for England, announced in February 2001, are:

- starting with children under one year, by 2010 to reduce by at least 10 per cent the gap in mortality between manual groups and the population as a whole
- starting with health authorities, by 2010 to reduce by at least 10 per cent the gap between the fifth of areas with the lowest life expectancy at birth and the population as a whole.

17. The National Service Framework (NSF) for Coronary Heart Disease requires all NHS bodies, working closely with local authorities, to be delivering local programmes of effective policies on promoting healthy eating and reducing overweight and obesity. The NSF for CHD also requires targeted interventions in primary care, with advice on diet and weight management. Meeting standard 1 of the NSF for Diabetes will require interventions addressing the prevention and reduction in the prevalence of overweight and obesity in the general population, and in individuals at increased risk of developing type 2 diabetes by promoting a balanced diet and physical activity. The Cancer Plan recognised that after

smoking, what people eat is the next biggest contributor to cancer deaths, and may be responsible for up to a third of all cancer deaths.

18. Healthy eating is only one component of a healthy lifestyle. Other lifestyle issues also have an important impact on health and well being. Alcohol forms a commonplace part of many people's eating and drinking habits, and Government is already committed to producing our Alcohol Strategy by 2004, which will set out a comprehensive plan for harm reduction. Physical activity has a significant effect on health, and a low level of physical activity has a close relationship with diet related illness. Government is already investing heavily in improving opportunities for physical activity including the setting up of a new Sport and Physical Activity Board (SPAB), and it is important to see this action plan for food and health in the context of these and other initiatives.

### **Tackling health inequalities**

19. The Government's crosscutting review of health inequalities showed how the factors that contribute to poverty and social exclusion are complex, and inter-related. It is clear that reducing health inequalities cannot effectively be tackled by any single sector or organisation, [add line here on Inequalities Delivery Plan when complete]. The Government's policies for tackling poverty and deprivation have a key role to play in narrowing the health gap, but our strategies for tackling inequality also recognises the pivotal role that diet can play in determining health, and life chances. For example, there is evidence to suggest that children's diet can affect their ability to learn, and their performance in school. Children who have not had breakfast are more likely to suffer from impaired memory and attention span, and are less able to process information.<sup>1</sup>

20. Food is a key marker of social inclusion, playing a central part in much of our social interaction. Many of our celebrations (birthdays, weddings, festivals) involve special meals, shared with friends, family or the wider community. The pattern of our ordinary daily life is punctuated by meal times, and the foods that these contain says much about our cultural background. Snacks and treats are an enjoyable part of life too. The social expectations of our family and friends shape our decisions about the food we buy and eat. Food is important to our ability to participate in modern society, and an inability to buy, cook, or share the same sort of food as our peers is profoundly isolating. Government policies on food need to recognise this wide range of influences, and as far as possible make it simple for people to make food choices that support health, and also fit with their way of life.

### **International context**

21. This Action Plan has been developed to support a wider framework of action across Europe and worldwide. The EU Council resolution of 14 December

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<sup>1</sup> D T Simeon and S Grantham-McGregor, 'Effect of missing breakfast on the cognitive functions of school children of different nutritional status', *American Journal of Clinical Nutrition*, 49, 1989, pp646-653. Cited in Dowler E et al, *Poverty Bites*, p62.

2000 on health and nutrition emphasised the importance of nutrition as one of the key determinants of human health, and notes that the state of the health of the population can be protected and improved by targeting action on nutrition. The resolution noted that action on diet and nutrition issues varied across the union, and invited member states to develop their own national nutritional policies.

22. The World Health Organization, at the fifty-fifth World Health Assembly in January 2002, urged members worldwide to collaborate with WHO in developing a global strategy on diet, physical activity and health for the prevention and control of non-communicable diseases. Building on this, the WHO European Region has set a goal for all member states to have nutrition plans and strategies in place by 2005.

### **The Strategy for Sustainable Farming and Food**

23. The Government's Strategy for Sustainable Farming and Food, published in December 2002, identified healthy eating as one of its key principles with an explicit aim to:

- produce safe, healthy products in response to market demands, and ensure that all consumers have access to nutritious food, and to accurate information about food products.

24. The Strategy recognised the need to look at healthy eating in a joined-up way and included a commitment to develop this Food and Health Action Plan to address healthy eating at every stage of life. At the same time the commitment was made to build on the work that Government is already doing to improve diet and nutrition, including through partnership with industry and consumers, to support and influence:

- the production, manufacture and preparation of healthier food;
- the ease with which consumers are able to purchase or obtain the range of foods needed for a healthy diet; and
- the provision of information to consumers about healthy eating and nutrition, and the acquisition of skills and behaviours necessary for good nutrition.

### **Response to the Report of the Policy Commission**

25. The Government published its response to the Curry Commission's report simultaneously with the Strategy for Sustainable Farming and Food. Action being taken in response to many of the 105 recommendations will need to be joined up with action to improve health and nutrition. Examples, with the appropriate recommendation numbers, include:

- Research priorities board [5]
- Local food networks [6]

- Industry nutrition group [99]
- Levy board [6]
- RDAs and local food buying Co-ops [103]
- Farmers markets [104]
- Food chain centre [8]
- HDC/promotion [28]
- Shift Cap imports towards Pillar II [63]
- Advisory Committee on pesticides use [83]
- Countryside rights of way [87]
- School visits to farms [88]

26. Community food initiatives can make a contribution to joined-up health, social and environmental goals as well. Community food enterprises and gardening for health schemes, for example, are being supported by local agencies as a way of addressing social exclusion, urban regeneration, rural isolation, and green space protection. Economic benefits of such initiatives can include increased retention of money in the local economy, especially where links are made with local growers and producers.<sup>2</sup> In health terms, evaluations have shown that such projects probably make only a minor impact on individual diets<sup>3</sup> and their true worth is best seen in terms of helping to build a culture which is supportive of healthy eating patterns.

27. A future Food and Health Action Plan needs to be seen within the context of this broader policy context.

### **Wider factors influencing diet**

28. Individual food choices need to be seen in the context of the very wide range of factors which can influence diet. National and local policies on:
- agriculture
  - trade
  - housing
  - employment
  - retailing
  - regeneration
  - transport
  - spatial planning; and
  - welfare

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<sup>2</sup> Source: Friends of the Earth. August 2000. The Economic Benefits of Farmers Markets. Cited in: Local Food: a compilation of current work on the topic. In addition, the same paper refers to an evaluation of an organic box scheme with a 'multiplier' effect of 2.9, compared to 1.4 for a supermarket, based on Boyd T 2001. Cusgarne Organics Local Money Flows. New Economics Foundation and The Countryside Agency.

<sup>3</sup> Dobson, Dowler et al. For Joseph Rowntree Foundation.

all help to shape individual diets by determining availability of and access to food and have impacts which can be grouped as production, supply and consumer demand.

**QUESTIONS FOR DISCUSSION:**

- Are these policy drivers consistent with the goal of improving health through better diet?
- Is there a need for new mechanisms to ensure better co-ordination on food and health policy initiatives?

## CHAPTER 2

### FOOD AND HEALTH: WHAT ARE THE PROBLEMS?

- *Diet-related diseases place a significant burden on individuals, society and the state*
- *A growing number of adults and children are affected by cardiovascular diseases, obesity, cancers and diabetes linked to poor diet*

#### **The burden of diet-related disease**

29. The food we eat, and the way it is produced and manufactured, has a significant impact on health. Cancer and cardiovascular diseases including heart disease and stroke are the major causes of death in England, accounting for almost 60% of all premature deaths between them. The types of diet people eat and, therefore, the food they buy and the way it is processed and prepared, can influence the risk of developing these diseases. In total it is thought that treating ill-health caused by poor diet costs the NHS at least £2bn each year.<sup>4</sup>

#### **The cost of poor diet**

30. Poor diet has a far-reaching impact on the health of individuals, their relatives and friends. Diet related illnesses such as diabetes and obesity don't just increase an individual's risk of serious illness. They can seriously undermine quality of life as well, contributing to:

- Days lost through certified sickness or invalidity as a result of diet-related ill-health (cancers, stroke, CHD: myocardial infarction, angina, hypertension, obesity related ill-health: osteoarthritis, gallstones, Type 2 diabetes)
- Costs to the NHS of providing in-patient care for diet-related conditions
- Visits to the GP each year as a result of diet-related poor health
- Costs of community care related to diet-related ill-health
- Costs of NHS prescriptions for diet-related ill-health

#### **Cardiovascular disease**

31. Cardiovascular disease, including heart disease and stroke, is responsible for more than 20,000 deaths each year. For coronary heart disease alone it has been estimated that up to a third of all deaths are attributable to dietary factors. The cost to the UK economy has been put at £10bn annually.<sup>5</sup> A small reduction in salt intakes across the population could lead to significant improvements in

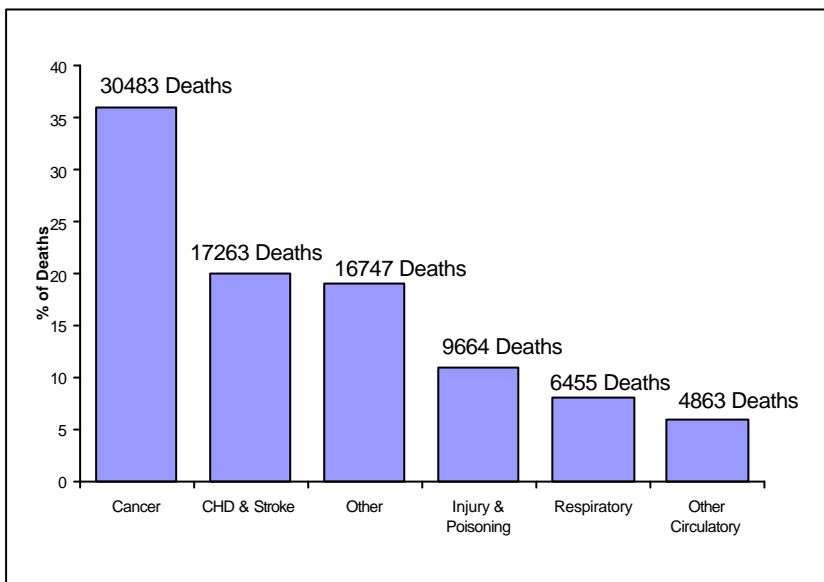
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<sup>4</sup> *Source:* British Heart Foundation 1998 Coronary heart disease statistics: economic supplement [www.heartstats.org](http://www.heartstats.org)

<sup>5</sup> This figure includes £1.6bn in treatment costs to the NHS, and £8.4bn in indirect costs to the wider economy through loss of productivity, death and disability *Source:* British Heart Foundation 1998 Coronary heart disease statistics: economic supplement [www.heartstats.org](http://www.heartstats.org)

health. A two point reduction in average blood pressure readings across the population could be expected to reduce rates of stroke by 16% and coronary heart disease by 6% (Greenland Editorial, NEJM, 2001). 75% of the salt we consume comes from processed foods.

**Figure one: Major causes of premature death (before age 65)**



Source: ONS

## Cancer

32. Cancer accounts for over 30,000 premature deaths annually, with diet thought to play a role in about a quarter of these. Dietary changes could help to prevent up to a third of all cancers from occurring in the first place. After reducing smoking, increased consumption of fruit and vegetables may be the most effective cancer prevention strategy (Day, 2000, Report to Department of Health).

## Obesity

33. The World Health Organization has called obesity a 'global public health epidemic'. Within England, the prevalence of obesity is now three times greater than it was twenty years ago. Over a fifth of the population is now obese. 23.5% of women and 21% of men are classified as obese, against just 8% of women and 6% of men in 1980. In addition, a further 47% of men and 33% of women are classified as overweight (HSE 2001). Evidence suggests that obesity is increasing more rapidly in England than in other areas of Europe.

34. The recent National Audit Office report *Tackling Obesity in England* estimated that more than 30,000 deaths were attributable to obesity in 1998, a figure equivalent to 9 years of life lost for each individual affected. As well as being a debilitating condition in itself, obesity predisposes people to heart disease, high blood pressure and some types of cancer (especially cancers of the breast and

colon). The additional strain on joints can result in osteoarthritis. Obesity can also have a profound effect on the mental wellbeing of those affected. The NAO estimates costs of obesity to the NHS (1998) to be at least £½ billion and costs to the wider economy to be more than £2 billion a year. The NAO predicts that on present trends, the costs of obesity could increase to £3.6 billion by 2010.

35. This growth in obesity is attributed to changes in diet, physical activity and lifestyle including higher rates of snacking and eating outside the home.

### **Diabetes**

36. Obesity is a major risk factor for Type 2 diabetes (the most common form). There is increasing evidence to suggest that it is possible to prevent this form of diabetes - or at least delay its onset - by tackling overweight and obesity and promoting physical activity<sup>6</sup>. The risk of developing diabetes increases as body weight increases – diabetes is approximately three times more common in people who have gained around 10kg in weight during adulthood than in those who maintain their weight<sup>7</sup>.

### **Conclusion**

37. It is clear that diet related ill-health must be a significant area of concern for Government. To address the true causes of poor diet, and develop effective solutions that will deliver the improvements that are so urgently needed, we need to start with a firm understanding of what people are eating, and the factors that influence their decisions about what to buy, cook and eat. This is what the next two chapters examine.

### **QUESTIONS FOR DISCUSSION**

- Does this section correctly identify the major health problems attributable to diet?
- What additional research would help to identify the scale of the problem, and give a sense of emerging trends?

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<sup>6</sup> Tuomilehto J et al. *New Eng J Med* 2001; **344**: 1343-1350

<sup>7</sup> Jung RT. Obesity as a disease. *British Medical Bulletin* 1997; **53**(2): 307-321.

**CHAPTER 3****FOOD AND DIET TODAY: WHAT ARE PEOPLE EATING?**

- *Advice on healthy eating is consistent and well established based on sound evidence*
- *Few people currently follow Government advice for a healthy diet*
- *Most people eat more saturated fat, salt and sugar and less fruit and vegetables than experts recommend*
- *The diet of people on low incomes is an area of particular concern*

38. The association of a healthy balanced diet with health and well-being is well recognised. Surveys have consistently shown that there is increasing awareness of the need to consume a healthy diet particularly with regard to some aspects such as the advice to cut down on fat, salt and sugar. Despite the high awareness only a small proportion of people consume what is classically known as the healthy diet. In particular a majority of people consumes less than the recommended amount of fruit and vegetables and fibre but more than the recommended amounts of fat, saturated fat, added salt and sugar.

39. Our food and health action plan aims to improve health through better diet across the population as a whole. Achieving this requires targeted solutions that are appropriate to the needs, preferences and circumstances of people at each stage of life, and from all population groups.

**Gathering information about diet**

40. Accurate and up-to-date information on the amounts and types of foods eaten is essential to provide a sound evidence base for focussed action to improve diet and nutrition. A range of government surveys provides information about the state of the nation's diet.

- The National Diet and Nutrition Survey programme is jointly run by the Department of Health and the Food Standards Agency. The programme provides comprehensive, cross-sectional information on the dietary habits and linked data on markers of nutritional status of the population of Great Britain including socio-economic, demographic and lifestyle characteristics. The programme of surveys covered different age groups (adults aged 19-64, people 65 and over, young people aged 4-18 years and children aged 1.5-4.5 years. The different age groups are surveyed as part of a rolling programme. Each survey collects detailed information on food consumption and nutrient intake using a weighed dietary record, provided by participants over a four or seven day period, physical measurements including height, weight and blood pressure, an assessment of oral health as well as blood and urine samples
- The Expenditure and Food survey (EFS) replaced the National Food Survey (NFS) from April 2001. The EFS is commissioned jointly by the Office of National Statistics (ONS) and the Department of Environment,

Food and Rural Affairs (DEFRA). It is a continuous survey of households in the United Kingdom and provides information about food purchases and expenditure, food consumption (including food consumed outside the home) and nutrient intakes. Data is collected on a household basis and averaged across members of the household. An implication of this is that analyses such as by food consumption by age are restricted to, for example, household consumption by age of the person designated as household reference person.

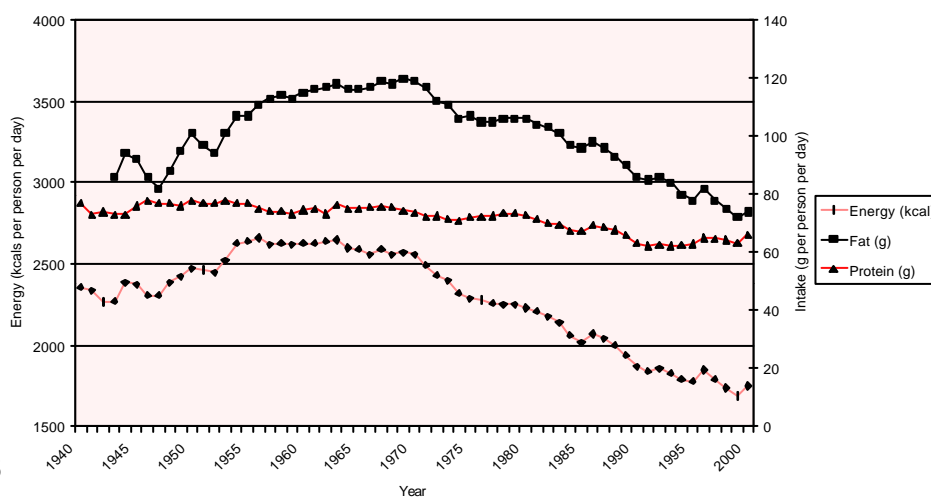
- The Health Survey for England is a series of annual surveys about the health of people living in England. It is commissioned by the Department of Health to provide reliable information about various aspects of people's health, and to monitor selected health targets. The survey includes a module to monitor fruit and vegetable intake in the population through a structured questionnaire.
- Low-income Diet and Nutrition Survey is currently being undertaken by the FSA. The survey will provide for the first time, robust, nationally representative, baseline data on food consumption or nutrient intakes and nutritional status and factors affecting these in low income/materially deprived consumers.

### Key trends in the UK diet

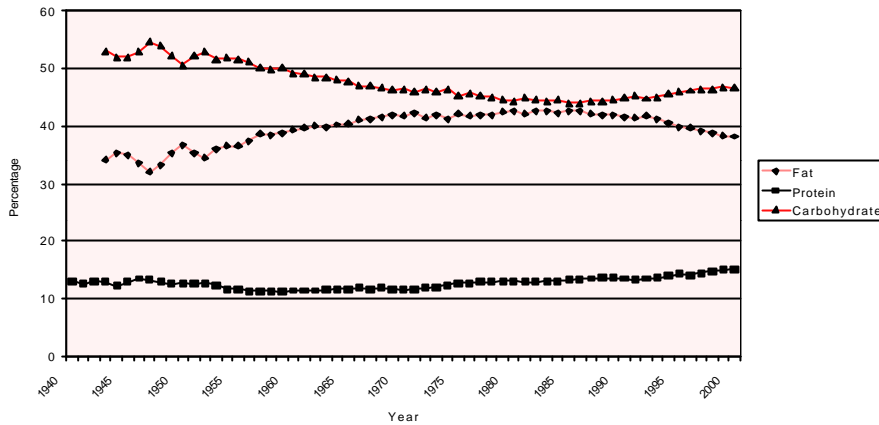
41. There have been some key changes in UK diet since 1940s. Data from annual surveys such as the NFS is best used for assessing trends in intake of different foods and changes in the nutritional quality of the nation's diet.

#### *Nutritional Value of household food supplies 1940 - 2000*

42. The total energy value of the diet as well the amount of fat in the diet has been steadily decreasing since mid-1970s. The decline may in part be explained by under-reporting of food intake or by increasing trends in more foods being consumed "on the move" or eaten outside the home. There has been a gradual decline in the proportion of energy from fat since mid-90s but is still well above the recommended intake of 35%.

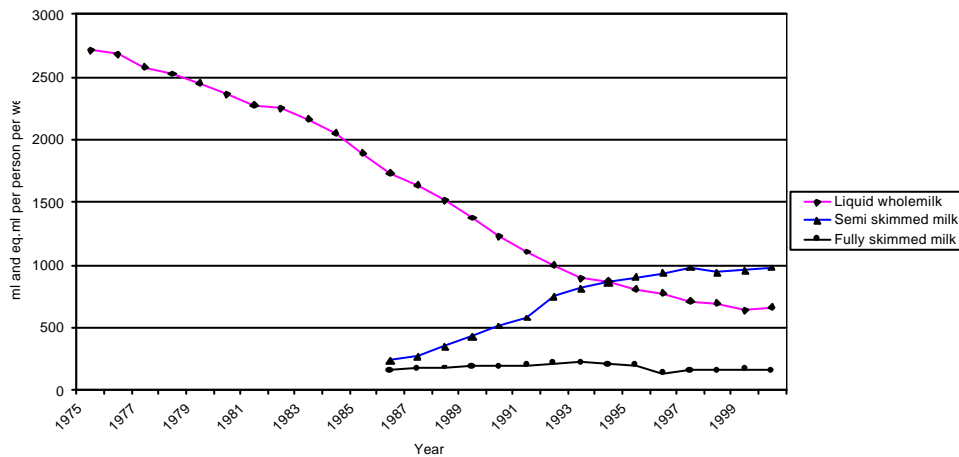


*Trends in the percentage of food energy derived from fat, protein and carbohydrate, 1940 - 2000*



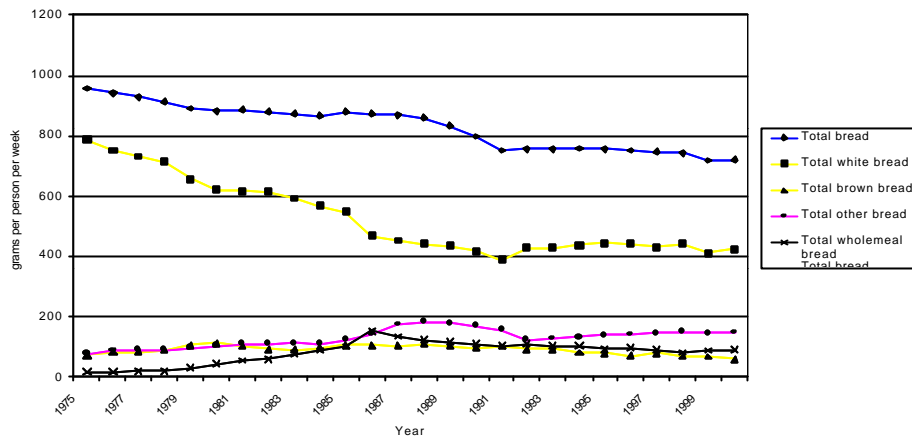
*Trends in household consumption of liquid milk 1975 – 2000*

43. Consumption of liquid whole milk declined during the past twenty five years though there have been some signs of a levelling off in the last few years. Semi-skimmed milk is most popularly consumed today representing a key dietary change in the '90s, which may contributed to the observed decline in fat intakes.



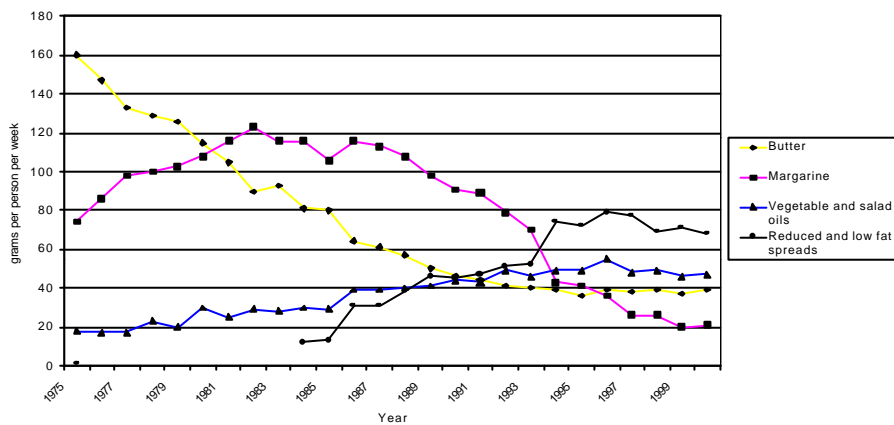
*Trends in household consumption of bread*

44. Per capita consumption of bread (in the home) declined up to the early 1990s but then steadied before falling again in 1999. In 2000 it rose fractionally but it was still 25 per cent down on 1975. White bread exhibited a similar pattern to the total but consumption of wholemeal bread rose until the mid-1980s but slowly declined thereafter.



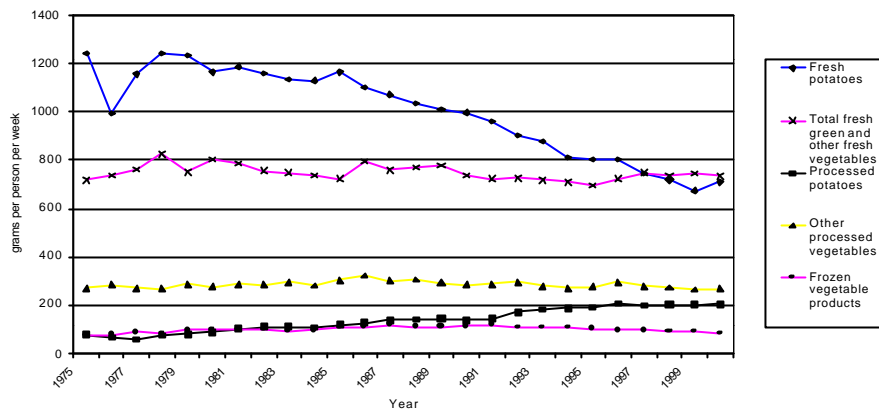
*Trends in household consumption of fats and oils 1975-2000*

45. Butter and margarine dominated the market in fats and oils for home consumption until the early 1990s, though they were becoming less dominant by the early 1980s. From the mid-1990s only margarine continued to decline, while the consumption of reduced-fat and low-fat spreads increased.



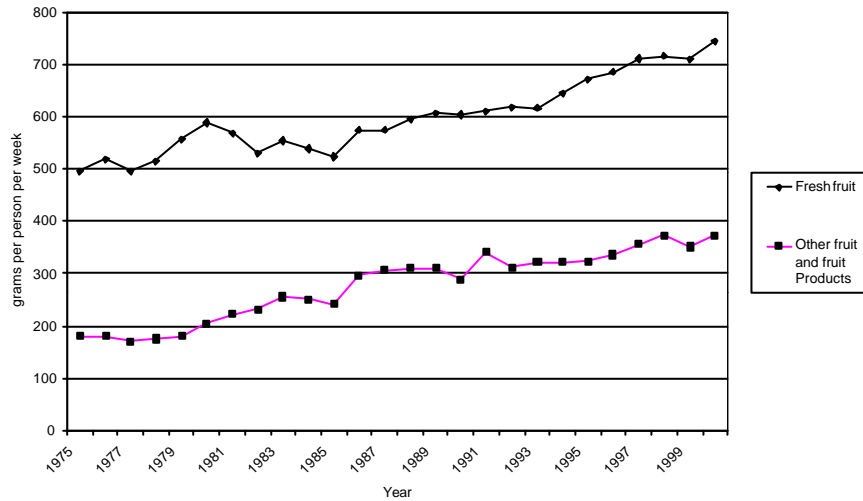
*Trends in household consumption of vegetables 1975 – 2000*

46. Consumption of fresh vegetables has remained relatively constant over the whole period. However, within the total, consumption of fresh green vegetables was 27 per cent lower in 2000 than in 1975 whilst consumption of other fresh vegetables was 26 per cent higher.



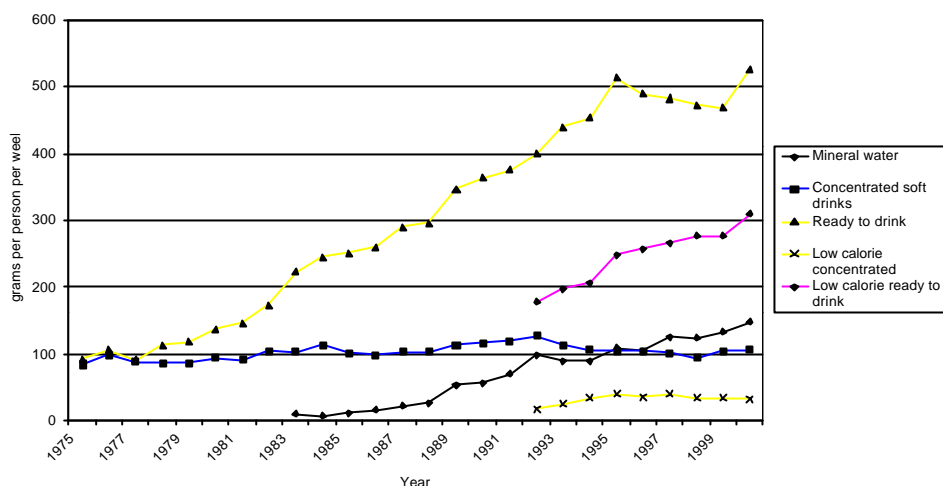
*Trends in household consumption of fresh fruit and other fruit products 1975-2000*

47. Consumption of fresh fruit in the home has risen for much of the last twenty-five years. Bananas are the most popular fruits and their consumption rose sharply over taking that of apples. Home consumption of the other main fruits rose over the period, especially of grapes and stone fruits and fruit juice. There was also a sharp increase in the consumption of fruit juice.



*Trends in household consumption of soft drinks and mineral water 1975 - 2000*

48. Consumption of mineral water (in the home) has increased twelve fold since the mid-1980s, including a growth of a third since the mid-1990s.



49. Overall, there have been some favourable changes in the UK diet particularly the change from whole milk to semi-skimmed milk and the increase in the consumption of reduced- and low-fat spreads. These changes can help towards achieving the target of 35% of energy from fat. However there is much room for improvement particularly with regard to the consumption of fruit and vegetables.

### **Key dietary differences within the UK population**

50. In general surveys show that there are marked differences in consumption patterns across different age groups and income levels in the population. Our food and health action plan aims to improve health through better diet across the population as a whole. Achieving this requires targeted solutions that are appropriate to the needs, preferences and circumstances of people at each stage of life, and from all parts of the population. There are important differences in dietary patterns, nutrient intakes and nutritional status across different population groups.

### ***Diet in different age groups***

51. Young children aged 1½-4½ years (NDNS 1992/93)

- Sausages, chicken and turkey dishes and beef, veal and dishes were the most commonly consumed types of meat eaten by about half of the children surveyed;
- Carrots, peas and baked beans were the most commonly consumed vegetables, each eaten by about half the children; apples and pears were the most popular fruits, also eaten by about half the children. Twenty percent of the children did not consume any fruit during the four-days of the survey.
- Most children were given whole milk as a drink. The majority of children had soft drinks and a third consumed tea.
- Average intakes of B vitamins and vitamin C met recommendations.

- Average intakes of iron were below recommended levels and a significant proportion of this group had low iron intakes. One in twelve of the age group as a whole and one in eight of the youngest children were anaemic.
- Low intakes of vitamin A and zinc were found in a significant proportion of this age group.
- Average intakes of non-milk extrinsic sugars were higher than recommended. .

#### 52. Young People aged 4-18 years

- Consumption of fruit and vegetables was low. Taking fruit, vegetables and fruit juice together, average consumption was 2-3 portions per day [188g/day]. Twenty percent of young people ate no fruit during the survey week.
- Chicken and turkey was the most commonly consumed type of meat, eaten by over 70% of young people during the survey week.
- Three quarters of young people drank standard fizzy drinks and 45% drank low calorie fizzy drinks
- The majority of young people reported having milk as a drink. Semi-skimmed milk was the usual type drunk for over a third of the 4-6 age group and over half of those aged 11 and over.
- Average intakes of vitamins and most minerals were above recommended levels
- Low intakes of some vitamins and minerals in older children (vitamin A, riboflavin, iron, zinc, calcium, magnesium, potassium)
- Three percent of boys and 8% of girls in the 4-6 year age group were anaemic. Some evidence of poor iron status in older children.
- Average intakes of non-milk extrinsic sugars and saturated fatty acids were higher than recommended.

#### 53. Adults aged 19-64 years (2000/01)

**[DN: Information on nutrient intakes of adults will be available in July and nutritional status later in the year.]**

- Compared to younger adults, older adults (especially women) have made changes to their diets in line with Government recommendations on consumption of fruit and vegetables and oily fish. Older adults ate more fruit and vegetables and oily fish than the youngest group.
- The youngest adults consume more soft drinks than the oldest group and almost four times as much of fizzy drinks. Youngest adults consumed six cans of fizzy drinks each week on average, compared to three cans in 1986/7
- Older people are most likely to eat wholemeal bread, whole grain and high fibre breakfast cereals than the youngest sections of society
- Younger people eat less fruit and vegetables than older groups.

## 54. Older people aged 65 years and over

- Average intakes of most vitamins and minerals were above recommended levels
- Vitamin D status was poor in some people, particularly for those in residential and nursing homes and in the winter months.
- Poor oral health, especially lack of natural teeth was associated with poor diet and nutritional status
- Some people, especially those in residential and nursing homes had low blood levels of some vitamins and minerals.
- Average intakes of non-milk extrinsic sugars and saturated fatty acids exceeded recommended levels.
- Average fibre intakes were lower than recommended.

***Diet and low income***

55. Diet-related ill-health displays a marked socio-economic gradient. The death rate for coronary heart disease, for example, is now three times higher among unskilled men of working age than among professionals, with the gap having widened sharply over the most recent 20 years from which figures are available. The picture in relation to dietary consumption among people on low incomes is less clear cut, although there are obvious differences in some important respects – for example, children from disadvantaged households eat on average half as much fruit and vegetables as children from high income households. Information from the National Food Survey, and the National Diet and Nutrition Survey, shows that poorer households consume:

- less fruit and vegetables; salads; wholemeal bread and whole grain and high-fibre cereals; oily fish
- more white bread; full-fat milk; table sugar; processed meat products often high in fat such as burgers, kebabs, meat pies and pasties.

**Comparison of dietary recommendations and current intakes**

56. The Government's healthy eating messages at Annex 1 are based on the recommendations made by the Committee on Medical Aspects of Food and Nutrition Policy (COMA) and international organisations like the World Health Organizations. The key dietary recommendations are taken as population goals to be achieved. These can be compared to average intakes in the UK estimated as in the case of the NFS or EFS from household purchases or through individual measurement of dietary intake from a weighed food diary over a period of 4 -7 days as in the case of NDNS. The latter is more suitable to assess nutritional status of the population and is undertaken about once in 10 years. Data from annual surveys such as NFS or EFS is best used for assessing trends in intake of different foods.

57. Table 1 compares the current state of the UK diet with key dietary recommendations. Historical data from the NFS shows that there has been a declining trend in fat intake since 1994 and is on course to meet the target. However, it is to be noted that the average figures do not reflect the considerable variation in intakes in the population and there may only be a small proportion who actually meet the recommendation.

**Table 1: Average household consumption and average intakes of British adults compared with COMA recommendations [to be updated with data from EFS 2002 and NDNS 2000]**

<i>Key dietary recommendations<sup>1</sup></i>	<i>Average household consumption (NFS 2000)<sup>2</sup></i>	<i>Average intakes in British adults 1986/87 (NDNS 1990)<sup>3</sup></i>
<b>Total fat</b> – reduce to 35% energy	36.5%	40%
<b>Saturated fat</b> - reduce to no more than 11% energy	14.5%	16%
<b>N-3 PUFAs</b> - increase long chain n-3 PUFA to 0.2g/day (1.5g/week)		0.1g
<b>Total carbohydrate</b> - increase to approximately 50% energy	47.6%	45%
<b>Sugars (added)</b> - no more than 11% energy per day		13%
<b>Dietary fibre</b> - increase in non-starch polysaccharides to 18g per day	12.7g per day	12g per day
<b>Salt</b> - reduce to no more than 6g salt per day		9g per day
<b>Increase fruit and vegetable consumption</b> to at least 5 portions per day (2800g/week or 400g/day)	2197g/week	1724g/week <sup>4</sup>

**Notes:**

<sup>1</sup> Nutrient recommendations and baseline average intakes based on COMA (1994) *Nutritional Aspects of Cardiovascular Disease* and COMA (1998) *Nutritional Aspects of the Development of cancer*

<sup>2</sup> Department for Environment, Food and Rural Affairs (2001) *National Food Survey 2000 HMSO, London*

<sup>3</sup> Gregory J, Foster K, Tyler H and Wiseman M (1990). *The Dietary and National Survey of British Adults. HMSO, London.*

<sup>4</sup> Henderson L, Gregory J and Swan G (2000). *The National Diet and Nutrition Survey: adults aged 19 to 64 years. Report 1: Types and quantities of foods consumed. TSO, UK*

58. As the frequency of “eating out” increases, food outside the home can significantly contribute to energy and fat intakes. According to NFS 2000, food eaten outside the home contributes 11 per cent of total energy intake. Fat intake from food eaten outside the home contributes slightly more, 12 per cent, of total fat intake. It is to be noted that food eaten out does not include takeaways, which are treated as household food.

59. In 1994 COMA in its report *Nutritional Aspects of Cardiovascular Disease* set out an illustrative example of changes to the average diet measured in NFS 1992 that are required to achieve the above dietary recommendations. Average consumption of various foods recommended by COMA will be compared to average amounts of foods consumed in the EFS 2002.

**Table 2: Required changes to the nation’s diet to meet key dietary recommendations**

<i>Food Group</i>	<i>Average consumption in 1992 NFS 1992</i>	<i>Average consumption to meet COMA recommendations</i>	<i>Average consumption in 2001/02</i> <i>[EFS data to be added when available]</i>
Milk	1 glass whole milk + 1 glass of semi-skimmed milk daily (280ml)	½ glass whole milk + 1¾ semi-skimmed milk daily (305ml)	
Other milk and cream	1 tablespoon (37ml)	½ tablespoon (19ml)	
Cheese	Filling for 2-3 sandwiches each week (115g)	Filling for 1-2 sandwiches each week (60g)	
Carcass meat-beef & lamb	2 portions each week (210g)	2 portions of lean meat (210g)	
Pork & Poultry	3 portions each week (300g)	3 portions each week (300g)	
Other meat & meat products	7 portions each week (440g)	3½ portions each week (220g) assumes 30% reduction in salt content	
Fish & fish products	1 portion of white fish or fish products + ½ portion of oily fish each week (140g)	1 portion white fish + 1 portion of oily fish each week (190g)	
Eggs	1 egg each week (60g)	1 egg each week (60g)	
Butter	40g }	20g }	
Margarine	80g }	40g }	
	Spread for 3 slices of bread each day	Spread for 1½ slices each day	
Low & reduced fat spreads	50g } spread for 1 slice of bread each day	120g } spread for 2½ slices of bread each day	
Vegetable oils	4½ tablespoons each	9 tablespoons each week	

	week (50g)	(100g)	
Other fats	1½ tablespoons each week (25g)	¾ tablespoon each week (10g)	
Potatoes	1 small portion (2 egg-sized each day) (128g)	1 medium portion (3 egg-sized potatoes each day) (180g)	
Potato products	2 potato croquettes or 1 medium portion chips each week (170g)	Either 1 potato croquette or small portion chips each week (80g)	
Vegetables and products	2-3 portions each day (161g)	4 portions each day (241g) assumes 30% reduction in salt content of processed vegetables	
Fruit and products	1½ pieces each day (132g)	2 pieces of fruit each day (184g)	
Bread	3 slices each day – of which 1½ slice wholemeal (107g)	4½ slices each day – of which 1 slice wholemeal (161g) assumes 30% reduction in salt content	
Buns, cakes & pastries	3-4 biscuits each day (41g)	1-2 biscuits each day (21g)	
Breakfast cereals	1 bowl each day (19g)	1 bowl each day (19g)	
Other cereals	1 serving of pasta or rice each day (41g)	1 serving of pasta or rice each day (41g)	
Sugar & preserves	6 teaspoons of sugar each day or a good spread for 2 slices bread (29g)	5 teaspoons of sugar each day or a thin spread for 2 slices bread (27g)	
Soft drinks (containing sugar)*	2 cans each week (720ml)	1 can each week (360ml)	
Chocolate confectionery*	1 small bar each week (35g)	¾ bar each week (30g)	
Sugar confectionery*	3 boiled sweets each week (15g)	3 boiled sweets each week (15g)	
All other foods	2 tablespoons pickle or dressing each day (63g)	2 tablespoons pickle or dressing each day (63g)	

**\* Consumption is underreported because the figures do not take account of consumption outside the home.**

60. The Government is committed to improve the overall balance of the diet with respect to fat, salt and sugar. One way to help achieve this is renewed focus

to reduce the fat, sugar and salt content of particular foods. Tables 3-6 show the main sources of fat, saturated fat, added sugar and salt in the UK diet.

**Table 3: Significant sources of fat in the diet (NDNS 1990)**

<b>Foods</b>	<b>Proportion (%) contributing to total fat intake</b>
<b>Meat &amp; meat products</b>	<b>24%</b>
<b>Cereals &amp; cereal products– includes pizzas; biscuits; buns; cakes &amp; pastries; bread</b>	<b>19%</b>
<b>Milk and milk products –includes cheese</b>	<b>15%</b>
<b>Fat spreads</b>	<b>16%</b>
<b>Potatoes and savoury snacks of which</b>	<b>7%</b>
<i>Chips</i>	5%
<i>Savoury snacks</i>	2%
<b>Vegetable excluding potatoes</b>	<b>5%</b>
<b>Fish and Fish dishes</b>	<b>3%</b>

**Table 4: Significant sources of saturated fat in the diet (NDNS 1990)**

<b>Foods</b>	<b>Proportion (%) contributing to saturated fat intake</b>
<b>Milk and milk products of which</b>	<b>23%</b>
<i>cheese</i>	9%
<b>Meat &amp; meat products</b>	<b>23%</b>
<b>Cereals &amp; cereal products– includes pizzas; biscuits; buns; cakes &amp; pastries; bread</b>	<b>18%</b>
<b>Fat spreads of which</b>	<b>17%</b>
<i>Butter</i>	10%
<b>Chocolate confectionery</b>	<b>4%</b>

**Table 5: Significant sources of sodium (salt) in the diet (NFS 2000)**

<b>Foods</b>	<b>Proportion (%) contributing to sodium intake</b>
<b>Cereals &amp; cereal products– includes pizzas; biscuits; buns; cakes &amp; pastries; bread</b>	<b>38%</b>
<b>Meat &amp; meat products</b>	<b>21%</b>
<b>Miscellaneous – includes soups, sauces and condiments</b>	<b>13%</b>
<b>Milk and milk products of which</b>	<b>5.4%</b>
<i>cheese</i>	4.2%
<b>Processed vegetables including crisps and snacks</b>	<b>8.5%</b>
<b>Fish</b>	<b>3%</b>

**Table 6: Significant sources of non-milk extrinsic sugars in the diet (NDNS 1990)**

<b>Foods</b>	<b>Proportion (%) contributing to non-milk sugar intake</b>
<b>Beverages</b>	<b>17%</b>
<b>Sugars, preserves and confectionery of which</b>	<b>29%</b>
<i>chocolate confectionery</i>	6%
<b>cereals &amp; cereal products– includes biscuits; buns; cakes &amp; pastries; breakfast cereals</b>	<b>23%</b>

61. The above analysis shows that action to improve the nation's diet should focus on some key foods. The main contributors to fat and saturated fat intakes are meat and meat products, cereal and cereal products which include breads, breakfast cereals and pizzas and milk and milk products. Consumption trends since 1970s show that the intake of bread has decreased while intakes of breakfast cereals and pizzas have increased. Although there has been a steep decline in the consumption of whole milk, this has been offset by an increase in cheese intake and milk and milk products continue to contribute significant amounts of saturated fat to the diet.

62. The NFS 2000 showed that cereal and cereal products, meat and meat products and miscellaneous foods such as soups, sauces and condiments are the main sources of sodium (salt) intakes. As 75% of salt in the diet is from processed foods, a reduction in the levels of salt in these foods would help consumers to decrease their intakes.

63. Beverages including soft drinks contributed 17% of the total sugar intake. In the past two decades there has been a dramatic increase in their consumption. Cereal and cereal products that also include breakfast cereals contributed 23% of the total added sugar intake. While fortified breakfast cereals provide valuable amounts of vitamins and minerals, some are sugared and tend to be popular with children.

**[DN: To be completed. Discussion to include data from the EFS particularly on foods consumed outside the home and the forthcoming NDNS.]**

#### **QUESTIONS FOR DISCUSSION**

- What general conclusions can be drawn from this evidence about the state of the nation's diet?
- What are the main dietary problem areas on which action needs to be taken?

## CHAPTER 4

### FOOD AND DIET TODAY: TRENDS AND INFLUENCES

- *Dietary changes are influenced by production, supply and consumer demand*
- *Social changes are having an impact on the way people shop and eat*
- *For most consumers, food choices are driven by value, convenience and lack of time*
- *Attitudes to healthy eating are complex, and there are many important non-health factors influencing food choice, such as price.*

64. The reasons behind the dietary choices that people make are complex. Trends in food production, supply and consumer demand all have a significant influence. It is clear, however, that consumers are looking for convenience. Strategies need to respond to the differing needs of today's consumer and recognise the importance of partnerships with food chain and other organisations.

65. Individual food choices need to be seen in the context of the very wide range of factors, which shape individual diets by determining availability of and access to food and have impacts that can be grouped according to the following framework.

66. **PRODUCTION:** factors that influence the production, manufacture and preparation of foods that could most contribute to healthy diets.

67. **SUPPLY:** factors, which affect the ease with which consumers are able to purchase or obtain the range of foods, needed for a healthy diet.

68. **CONSUMER DEMAND:** factors which affect the provision of information to consumers about healthy eating and nutrition, and the acquisition of the skills and behaviours necessary for good nutrition.

69. All these factors need to be underpinned by **EVIDENCE BASE AND MONITORING:** meeting the information needs of Government, industry and consumers, including the provision of expert advice and through surveys and research.

#### **Food Production and Supply**

70. It is well known that there are many new challenges facing the food industry over the past few years – Foot and Mouth, BSE, and the huge increase in nutrition related illness to name a few. There has also been a significant increase in the range and availability of food over the past 50 years. In line with these challenges are the greater demands consumers place on the food industry for food that meets lifestyle requirements (e.g. time, convenience).

71. Retailers, producers, manufacturers and the food service providers are in an ideal position to influence the food supply and provide options for consumers

to make healthy choices. A number of the big retailers have done this through healthy eating ranges and also education initiatives providing information through the label e.g. labelling of 5 A DAY

### **The changing face of consumer demand**

72. Changes in the make up of society as a whole are having an impact on food choice. Social trends including the growth of female employment, increasing numbers of single person households, and growing numbers of professional couples without children, all affect the type of diet that people find fits with their lives. The Institute of Grocery Distribution sees today's consumer as:

- not a member of a traditional family
- may be living alone
- time pressured
- health aware – but over estimates the extent of their own healthy eating behaviour<sup>8</sup>

73. Attitudinal surveys, including the FSA's Consumer Attitudes Survey, show a consistent range of concerns and influences. The main factors to have emerged as drivers of food choices are **price and value, convenience and time.**

#### **Price**

74. Consumers in lower income groups are highly price sensitive. The cost of food has decreased gradually (relative to the retail price index) since the war. From the late 1970s, food has accounted for a decreasing share of household expenditure for most consumers. This has happened in the context of a three and half fold increase in average household income.

75. Price is a major influence on food choice for low-income consumers in particular. For the poorest fifth of the population, expenditure on food takes up just under a third of the household budget (30%), compared to the national average of just over a sixth (16%). One cohort study analysis that assessed the costs of different types of diet, concluded that a healthy diet costs over 50% more than an unhealthy diet, with expenditure on fruit and vegetables accounting for a significant proportion of this.<sup>9</sup>

76. Where people shop has a bearing on the amount they must spend. There are significant variations in the price of foods between corner shops, convenience stores and independent small supermarkets compared to large supermarkets or discounters. Smaller shops can offer convenience to those who do not have access to a car but higher operating margins helps to explain why basic foodstuffs can

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<sup>8</sup> *Consumer Watch 2002, Institute of Grocery Distribution.*

<sup>9</sup> Upmeier, Cade et al. 2001, cited in "Influences on fruit and vegetable consumption: A review of qualitative and descriptive research" Prepared for the Department of Health by Lynn Stockley, July 2001

cost almost 25% more in small stores than in the big supermarkets. If supermarket 'own brands' and value lines are taken into account, the difference may be as much as 60%.<sup>10</sup> Prices at street markets also tend to be lower. One study has calculated that a household on benefits would need to spend 25% more of their income on food if they could not get to a supermarket or street market.

### ***Convenience and time***

77. People spend less time cooking now than they did twenty years ago. The average time taken to prepare the evening meal fell from 90 minutes in the 1980s, to 30 minutes in the 1990s. It now stands at 20 minutes.<sup>11</sup> Consumers in employment spend 40% less time cooking than those who are not in work. Many consumers lack the time, skills, confidence, ideas or motivation to prepare a meal using raw ingredients. They seek out products that will make their lives easier. The practicalities of shopping are an important constraint for some people, particularly because of the weight and bulk of fruit and vegetables, and because fresh produce needs to be purchased frequently.<sup>12</sup>

78. These influences help to explain the increasing consumer demand reported for convenience food, snacking and eating on the move, and eating alone. Correspondingly, there is less demand for formal meals, and for cooking from scratch.<sup>13</sup>

### **Wider influences on food choice**

79. Consumers report a further set of pressures and concerns, which they see as influencing their food buying decisions. It is worth noting that there are limitations in some attitudinal surveys. The major retailers carry out their own research which reveals a more complex and subtle range of influences – as well as significant differences between what people say, and what they do.

80. Consumers have key concerns over food safety and food hygiene, which are outside the scope of this document. However they are also concerned about the **advertising of foods**, particularly to children, especially in relation to fruit and vegetable consumption. The ease with which food can be **transported** from the shops is also a factor for people without access to a car.

- **Advertising:** Consumers consistently express concern about the effects of advertising, but the evidence of its effects on food consumption in children is unclear. Sustain have found that more than 90% of food advertising screened during children's broadcasts is for foods that are high in fat, salt and or sugar.<sup>14</sup> Their study suggested that advertisements for

<sup>10</sup> Piachaud, D. and Webb, J. (1996) *The Price of Food: Missing Out on Mass Consumption*. Suntory and Toyota International Centre for Economics and Related Disciplines, London: London School of Economics.

<sup>11</sup> Source: Geest – quoted in IGD presentation. Full reference awaited from IGD.

<sup>12</sup> Consumers' Association 1997, cited in Stockley 2001.

<sup>13</sup> Food Retailing August 2001, Mintel.

<sup>14</sup> Sustain, *TV Dinners*, London, July 2001.

unhealthy foods were shown with much greater frequency during children's programmes than during adult watching times. Almost half of all the advertisements screened during children's television were for cakes and confectionery. However, an in-depth scientific review concluded that it was only one of many complex influences on food choice, and that it was difficult to assess the long-term effects. There do appear to be short term effects on purchase of products and brands (Young and Hetherington 1996) (Dickinson and Leader 1996). Action to date has taken the form of voluntary codes of practice and industry led initiatives, including Media Smart, an initiative, which aims to help children understand advertising.

- **Ease of travel:** While there are now around 28 million cars on the road, car ownership amongst people in lower socio-economic groups is about half that of those in higher socio-economic groups. This means that people without cars have to use public transport to travel to a supermarket, or buy from local shops, which can make shopping an inconvenient experience, as well as limiting choice and value.

### **Retail and Shopping Patterns**

81. More than nine out of ten consumers do most of their shopping at a supermarket. Only a minority of consumers (between three and nine percent) says they do their main shopping somewhere else.<sup>15</sup> In total, supermarkets supply around 85% of the groceries bought in the UK. Only 15% shoppers are completely loyal to their main store, with 29% using one other store and 22% using two others.<sup>16</sup>

82. As with manufactures, there has been a concentration in retailing in recent years. The top 5 UK supermarket chains now account for 66% of food sales while half of the country's food is now sold from just 1,000 large stores.

### **Supply Catering**

83. Eating outside the home is commonplace:

- 25% of respondents to the 2003 Consumer Attitudes survey said that they regularly used some form of fast food or takeaway outlet.<sup>17</sup>
- Between 1999 and 2000 alone, purchases of convenience foods rose by 24%.<sup>18</sup>
- Food eaten out is higher in fat than food eaten at home (including takeaways). The National Food Survey showed that in 2000 food eaten out provided 11 per cent of energy intake per person but 12 per cent of energy intake from fat.

<sup>15</sup> TNS for Food Standards Agency and COI Communications February 2003, *Consumer Attitudes to Food Standards Wave Three*.

<sup>16</sup> Mintel 2001

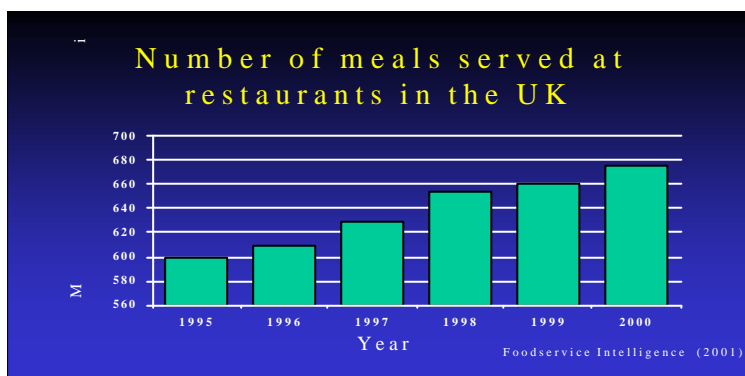
<sup>17</sup> TNS for Food Standards Agency and COI Communications February 2003, *Consumer Attitudes to Food Standards Wave Three*, page 3.

<sup>18</sup> Source: National Food Survey [information provided by FSA]

- Provisional results from the Expenditure and Food Survey showed that fat intake from food eaten at home remained the same in 2001/02 as it was in 2000/01, suggesting that the long term downward trend may be over.

84. The National Food Survey shows that household energy intake (measured by calories consumed) increased from the late 1950's to 1970, and then declined. The decline is partly explained by increased amounts of food eaten out of the home, which are not included in household food. Some of the most common sources of calories in modern diets, include soft and alcoholic drinks, and confectionery brought home, or food and drink purchased and eaten outside the home (the number of meals served at restaurants alone has been increasing since 1995 as shown in the chart below). In 1998 these components of the diet accounted for an additional 20% of energy intake.<sup>19</sup> The NFS for 2000 estimated that soft and alcoholic drinks and confectionery brought into the home contribute about 7% of energy and eating out provides a further 11%.

85. If takeaway style food is similar in fat content to food eaten out then this suggests that the trend towards consuming more takeaway meals, such as pizzas, burgers, or fried chicken is leading to increased fat intake which may outweigh the general decline. The evidence suggests that this should be one of the main areas in which change is needed. The challenge for the food and health action plan is to develop interventions which fit with the way people eat today, to enable them to eat more healthily within this lifestyle.



86. Another aspect of snacking that makes it harder for people to maintain a sensible level of consumption is so called 'super sizing'. Evidence from the US (Nielsen et al 2002) suggests that portion sizes are significantly larger than they were in the 1970s, especially for high calorie snacks and fast foods, making it much easier to overeat. This super sizing is now a feature of many foods eaten outside of the home in the England.

### Attitudes to healthy eating

<sup>19</sup> National Audit Office, *Tackling obesity in England: Report by the Comptroller and Auditor General HC 220 Session 2000-2001: 15 February 2001*, London, The Stationery Office, 2001, p13.

87. A review of the research into consumer attitudes and behaviour commissioned by the Department of Health described the factors that had most influence on healthy eating for different population groups.<sup>20</sup> The review considered the influences on general food choices, as well as choices affecting fruit and vegetable consumption. The messages are challenging when considered in relation to the three population groups with the most unhealthy diets:

- **Men:** On the whole men are not particularly interested in health until they become older, when they become concerned about health risks such as heart attacks and strokes.<sup>21</sup> Until then they generally believe that healthy foods are not enjoyable, and do not care a great deal what they eat. Within the family they may have a role in shopping and cooking, but this is seen as 'helping' rather than having a real responsibility. Despite this, they may have a powerful 'right of veto', which is very influential in terms of the food that is actually presented at family meals. Many men are not confident about cooking, and this becomes a particular issue for older single men<sup>22</sup> who eat less fruit and vegetables than their married counterparts, and rely on easy to prepare single portion foods. Men are not so aware of the health benefits of fruit and vegetables, or the recommended amounts.
- **Adolescents.** This group are very aware of healthy eating messages, but their behaviour does not reflect this. They are most likely to eat unhealthily when they are out with their friends or at school.<sup>23</sup> Some children eat more healthily because they are interested in sports, and girls become increasingly concerned about weight, and may change their diets in the light of this.<sup>24</sup> Older teenagers (15 years plus) turn increasingly to snacking and grazing. Their own cooking skills are poor, and they tend to rely on convenience foods that they can prepare themselves.<sup>25</sup> They are interested in enjoyment and convenience, but not health. Their family has little influence on their behaviour, and the peer pressure that was important when they were younger is beginning to change to independence, and sometimes rebellion.<sup>26</sup> People in their late teens and early 20's are less likely to be doing their own shopping compared with other adult groups, and more likely to be eating fast foods.<sup>27</sup> For many it is acquiring a

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<sup>20</sup> "Influences on fruit and vegetable consumption: A review of qualitative and descriptive research" Prepared for the Department of Health by Lynn Stockley, July 2001

<sup>21</sup> Source: Twelve discussion groups and seventeen face to face interviews, 68 telephone interviews: Health Education Authority 2000, cited in Stockley 2001.

<sup>22</sup> Source: Re-analysis of over 5,000 interviews with adults in England. Lang, Caraher et al. 1999 and sample of 350 elderly people in Nottingham, Donkin, Johnson et al. 1998, cited in Stockley 2001.

<sup>23</sup> Brown, McIlveen et al. 2000, cited in Stockley 2001.

<sup>24</sup> Stead and Goodlad 1996, cited in Stockley 2001.

<sup>25</sup> Department of Health 2001: Focus groups, London and South-East, 15-16 years, and late 20s-early 30s, male and female cited in Stockley 2001.

<sup>26</sup> Stead and Goodlad 1996, cited in Stockley 2001.

<sup>27</sup> Food Standards Agency: Interviews with a representative sample of over 3,000 people in the UK, cited in Stockley 2001.

responsibility for a family that makes them begin to think about health again, and this is a particular concern for women.<sup>28</sup>

- **Lower socio-economic groups.** People on low incomes consistently say that the main influence on the food they buy is its cost. They want food that is going to fill them and their family up, be acceptable to others, and not spoil quickly.<sup>29</sup> <sup>30</sup>Fruit and vegetables are thus a 'risky' purchase. They deteriorate quickly, result in waste, and are not regarded as filling.<sup>31</sup> Fruit in particular is seen as expensive. Vegetables are not so expensive, but are more likely to be rejected - especially by children.<sup>32</sup> Many people on low incomes do not have cars<sup>33</sup> and so bulky fruit and vegetables either have to be carried on public transport or bought from local shops. The concern about waste means that people on low incomes are reluctant to experiment with new foods. When they go shopping, they may deliberately adopt tunnel vision, so that they are not tempted by new and different foods.<sup>34</sup> Coping strategies for those who are not confident in their cooking include buying pre-packed food that can easily be divided into portions, and requires little preparation.

88. The influences on children are less clear, and while children do exercise food choice, the types of food that is available to them will be determined by a large extent by others. In developing food products for children, it is not just the child's need that must be satisfied but also the parents, typically the mother. The Sodexo School Meals survey (1996) showed that where pupils participated in school meal councils, children could give a more accurate definition of healthy eating, and the frequency of chip eating was lower. In general, even where children seem to have a good understanding of what healthy eating means, this seldom translates into them making healthy food choices.

89. These factors all influence the choices people make about their diet when they are shopping to eat at home, on the move, or eating out. The remaining section of this chapter looks at the environments within which people exercise their food choices.

### QUESTIONS FOR DISCUSSION

- Have we correctly identified the different facets of today's consumers?

<sup>29</sup> Health Education Authority 2000: Twelve discussion groups and seventeen face to face interviews, 68 telephone interviews, cited in Stockley 2001.

<sup>29</sup> Caraher, Dixon et al. 1998, cited in Stockley 2001.

<sup>30</sup> Consumers' Association 1997: Focus groups and interviews amongst people living on a low income, cited in Stockley 2001.

<sup>31</sup> Rowntree Foundation 1994, cited in Stockley 2001.

<sup>32</sup> Consumers' Association 1997: Focus groups and interviews amongst people living on a low income, and Save the Children Fund 1997, both cited in Stockley 2001

<sup>33</sup> Caraher, Dixon et al. 1998, cited in Stockley 2001.

<sup>34</sup> Health Education Authority 2000, cited in Stockley 2001.

- How can healthy eating policies meet the needs of time-poor, convenience-focused consumers?
- How can the food chain contribute to healthy eating?
- How can different sectors contribute to healthy eating?

## Annex 1

### DIETARY GUIDELINES

While there are no 'healthy' foods, a healthy balanced diet that adheres to simple nutritional guidelines can contribute to a reduced risk of cancer, heart disease, diabetes, hypertension, stroke and obesity.

The Government's key healthy eating message is promoted through the *Balance of Good Health*, which is a diagrammatic representation of the types and proportions of different foods that make up a healthy balanced diet. The clear message is to eat a diet based on a wide variety of food and containing at least five portions of fruit and vegetables and plenty of starchy foods, such as bread, potatoes, rice and pasta. It is recommended that the amount of fat (particularly saturated fat), salt and added sugars are kept to a minimum. The illustration below shows how these foods should add up to a balanced diet.

#### The Balance of Good Health



#### **Fruit and Vegetables**

Fruit and vegetables should form about a third of the food eaten in an average day. The aim should be to eat at least five portions (80g each) of a variety of fruit and vegetables each day. This can include fresh, frozen, canned, dried or 100% juiced

#### **What is a portion of fruit or vegetables?**

- 1 apple, banana, pear, orange or other similar sized fruit
- 2 plums or similar sized fruit
- ½ a grapefruit or avocado
- 1 slice of large fruit, such as melon or pineapple
- 3 tablespoonfuls of vegetables (raw, cooked, frozen or canned)
- 3 tablespoons of beans and pulses (however much you eat, beans and pulses count as a maximum of one portion a day)
- 3 tablespoonfuls of fruit salad (fresh or canned in fruit juice) or stewed fruit
- ½ to 1 tablespoonful of dried fruit such as raisins or 3 whole apricots
- a handful of grapes, cherries or berries
- a cereal bowl of mixed salad
- a glass (150ml) of 100% fruit juice (however much you drink, fruit juice counts as a maximum of one portion a day)

**Bread, cereals and starchy foods**

Bread, cereals and starchy foods such as potatoes should make up about a third of the diet. The aim should be to eat a variety. This food group includes bread, breakfast cereals, chappattis, oats, pasta, noodles, rice, potatoes, sweet potatoes, yams, dishes made from maize millet and cornmeal, plantains, green bananas, beans and lentils. Wholegrain, wholemeal, brown or 'high fibre' varieties should be chosen wherever possible. Starchy foods can become fattening if they're either served or cooked with fat.

**Milk and dairy foods**

For a healthy diet, most people should have milk, cheese, yoghurt, fromage frais and other dairy foods in moderate amounts. Lower fat versions should be chosen where possible. This group doesn't include butter and cream, which are all very high in fat.

**Foods containing fat and sugar**

For a healthy diet, most people should aim to eat less of these foods. Some foods containing fat will probably be eaten most days, and they provide essential fatty acids. But foods containing fat should be eaten sparingly, with more use made of low fat alternatives. Foods such as cakes, biscuits, pastries and ice cream should be kept to a minimum. Food and drinks containing sugar including soft drinks, sweets, jam and sugar, as well as foods such as cakes, puddings, biscuits, pastries and ice cream should not be eaten too often. As well as being very high in energy they can contribute to tooth decay. Any food and drink containing sugar should be consumed mainly at mealtimes to reduce the risk of tooth decay

**Meat, fish, eggs and alternatives**

For most people, a healthy diet means eating only moderate amounts of meat, fish and alternatives such as eggs, nuts and beans, and choosing lower fat versions when you can. Meat such as bacon and salami, and meat products such as sausages, beefburgers and pâté are all relatively high in fat, so should be kept to a minimum. Beans, such as canned baked beans and pulses, are a good low-fat source of protein. The aim should be to eat at least two portions of fish a week. This can be fresh, frozen or canned and include fish fingers and fish cakes. Each week, one of these portions should be of oily fish such as sardines, salmon, pilchard, mackerel, herring, trout or fresh tuna (not canned tuna but this is still a good source of protein and some vitamins). Choose lower-fat versions, which means meat with the fat cut off, poultry without the skin and fish without batter, or choose pulses. Cook these foods without added fat.

**Vitamins and minerals**

You should be able to get all the nutrients you need by eating a balanced diet, which includes at least five portions of fruit and vegetables a day.