

FINAL VERSION

Turning the Tables: Transforming School Food

Main Report

A report on the development and implementation of nutritional
standards for school lunches

Prepared by the School Meals Review Panel

29 September 2005

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- Presentation by Michael Nelson – The Contribution of School Meals to a Child's Daily Nutritional Intake.
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- Paper by Birmingham City Council – School Meals in Birmingham: The DSO Perspective.
- The Sodexo School Meals and Lifestyle Survey 2005.
- Paper by Bath and North East Somerset Local Education Authority dated 6 June 2005 – Overview and Scrutiny In-Depth Review Report: A Review by the Education, Youth, Culture and Leisure Overview and Scrutiny Panel.
- Summary reports provided by Food Standards Agency for pilot schemes that took place in Cambridge, Southwark and Knowsley –Piloting school meal menu changes to determine impact on pupil nutrient intake to support DfES' work to revise standards for secondary school meals.
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Executive Summary

Context

1. The health advantages of well-cooked, well-presented meals, made from good-quality ingredients to accepted nutritional standards, by school caterers who are confident in their skills and valued by the school community, are inestimable. The benefits of good school meals go beyond high quality catering. They also produce social, educational and economic advantages.
2. The Panel repeatedly heard head teachers and others from schools where food had already been improved speak of associated improvements in behaviour: of calmer, better behaved children, more ready to learn. Improving food in schools may contribute to improved attainment and behaviour.
3. School children of all ages should look forward to and enjoy their school meals, should learn about where their food comes from, and also take an interest in how it is produced. Improved food knowledge should include practical cooking skills so that children and young people who are now at school can, in their turn, look after themselves and their own families in a way which meets their health needs and their food preferences, enhancing their self esteem and self confidence. Transforming school food is as much about these aspects as about nutritional standards.
4. What children receive at home will always be more important than what they eat at school. But the school is crucial for modelling healthier choices and schools are a vital setting. Whilst they can help children learn and establish healthy eating patterns which will last for life, they can also introduce and reinforce habits which will slowly but surely erode children's health.
5. Children fed a monotonous diet of poor quality, predominantly processed food do not thrive. The statistics are striking. In 2002, 22% of boys and 28% of girls aged between 2-15 years were overweight or obese^{1,2} and these figures are continuing to worsen. It is estimated that obesity already costs the NHS directly around £1 billion per year³ and the UK economy a further £2.3 to £2.6 billion pounds in indirect costs.⁴ It has been estimated that, if the present trend continues, by 2010 the annual cost to the economy would be £3.6 billion pounds a year. Conservative estimates suggest that one third of girls and one fifth of boys will be obese by 2010⁵ – and many more will be overweight. The risks of this happening are greater in lower income households⁶. We have yet to witness the full implications of the obesity

¹ Health Survey for England, 2002

² RCPCH, RCGP and RIPH, 2004 Storing up the problems

³ Health Select Committee report on obesity 2004

⁴ House of Commons Health Committee, Third Report of 2003-04

⁵ BMA, 2005 Preventing childhood obesity

⁶ Jotangia D., Moody A., Stamatakis E. & Wardle H. (2005) Obesity among children under 11. Joint Health Surveys Unit/National Statistics.

epidemic in children. The chronic disease consequences come later – particularly diabetes, heart disease and many cancers⁷. The stark reality is that this generation of children faces the prospect of more ill-health and disability during their lifetimes unless radical steps are taken now.

6. There is no doubt that what children eat and the level of their activity⁸ are at the core of the problem, yet survey after survey continues to highlight school children's poor eating habits⁹. They are "grazing" on foods which are high in fat (particularly saturated fat), sugar and salt, yet shunning the very foods their bodies need for good health, such as fruit and vegetables.

7. The current crisis in school food is the result of years of public policy failure. Financial pressures and the fragmentation of school catering, together with a lack of strict standards, have resulted in the type of school meal we see too often today. The Panel is delighted that the Government has recognised the crucial importance of healthier school food. There is also now a groundswell of public opinion that we need to improve the quality of school food. This represents the best opportunity to upgrade the quality of food in schools since regulations were removed in 1980¹⁰

8. It is clear that schools can transform the food they offer to children. Many have already begun to do so. There is now an opportunity to ensure that every child has access to healthier school meals. This is an exciting, yet complex challenge: to transform school meal provision in over 20,000 schools. Responding to this challenge must involve the whole school community, the food industry and school meal providers.

9. It is within this context that the School Meals Review Panel was asked by the Secretary of State for Education to review existing standards and make recommendations to Government.

10. We believe our recommendations will lead to the consumption of healthier combinations of lunchtime foods by primary and secondary school children. This improved quality will clearly mean some increased costs; but these costs should be set against the health and other benefits. Redressing the imbalance in children's diets will contribute towards a reduction in obesity and diseases like tooth decay in young people. In the longer term, the changes we recommend now should reduce the chances of young people suffering from various chronic diseases later in life. But more than that, new standards can set the scene for holistic changes in the way young people perceive food and health, and can pave the way for wider changes in our food culture.

⁷ World Health Organisation (2003) Diet, Nutrition and the Prevention of Chronic Diseases. World Health Organisation, Geneva.

⁸ The Public Service Agreement target on PE and school sport is: "Enhance the take-up of sporting opportunities by 5-16 year olds by increasing the percentage of school children who spend a minimum of two hours each week on high quality PE and school sport within and beyond the curriculum from 25% in 2002 to 75% by 2006. Joint Target with DCMS." Public Service Agreement White Paper, 2002 Spending Review

⁹ Gregory J., Lowe S., Bates C.J., Prentice A., Jackson L.V., Smithers G., Wenlock R. & Farron M. (2000) National Diet and Nutrition survey: Young People aged 4-18 years. The Stationery Office., London.

¹⁰ See Paragraph 1.8

The Report

11. This report summarises the deliberations and presents the recommendations of the Panel. This multi-disciplinary expert group included headteachers, governors, school caterers, trade unions, people with practical experience in implementing healthy eating initiatives in schools, registered dietitians and nutritionists, public health experts, consumer and environmental group representatives, parents and representatives of the food industry. This report represents a collation of views and ideas from a wide range of people and interest groups: whilst not achieving unanimity on every matter, the report should be seen as a consensus view of the majority of members.

12. During the course of our work we considered evidence from a variety of sources including published scientific studies, evaluative projects and lessons learnt from schools and local authorities which have taken innovative steps to improve their school meals.

13. The core recommendation made is for school lunch provision (in both primary and secondary schools) to meet:

- 14 nutrient standards which are very similar to those released by the Caroline Walker Trust¹¹
- 9 food-based standards which maximise access to healthier foods (like fruit, vegetables and bread) and remove the availability of less healthy foods (like confectionery, pre-packaged savoury snacks and high-sugar or sweetened fizzy drinks).

14. In formulating these standards we considered children's needs across a broad spectrum: physical, social and educational. We paid attention not only to purely nutritional requirements but also to the wider issues: what children learn about preparing food themselves; lifelong cooking skills; the social benefits of sitting down to a shared meal; and the importance of an approach which is environmentally sustainable. As a consequence the report also contains 34 broader recommendations to promote coherent, "joined-up" thinking about healthy eating across the school day and to support schools and caterers in meeting these new standards.

Delivering Change

15. Experiences drawn from schools indicate that the standards recommended within this report are achievable. We acknowledge that they are challenging, particularly in secondary schools which presently offer a very wide range of food choices. The sample menus included in this report illustrate the level of change which schools will need to work towards. We have recommended a phased introduction of the standards, with essentially

¹¹ Crawley H. (2005) Eating well at school: Nutritional and practical guidelines. Caroline Walker Trust, London.

the food standards met by schools by September 2006, and then the nutrient standards met fully in all primary schools by September 2008 and in all secondary schools by September 2009.

16. A common thread in achieving change is controlling the range of choice, and we clearly and firmly advocate this. The new School Meals Review Panel (SMRP) standards are designed to drive the replacement of foods consumed at lunchtime which are low in nutritional value with foods which support children's health.

17. The Panel therefore agreed that confectionery, pre-packaged savoury snacks and high-sugar or sweetened fizzy drinks have no place in school lunch provision and other school food outlets¹². The standards for these foods and drinks are proposed as a statutory requirement of school lunch provision. In addition, we were very clear that, with appropriate modifications, they should be applied to other food outlets within the school and reflected in school policies for food brought into school. We concluded that it is by constructively controlling choice that we will widen children's food experiences. A greater variety of foods will help children to a healthier future.

18. This principle of 'choice control' has been shown to be effective not only for school lunches, but also in promoting healthier eating from other food outlets within schools. Successful 'healthy vending' projects in schools have already demonstrated that this can be done, particularly with the advent of refrigerated vending machines which enable a wider range of options such as sandwiches, fresh fruit, juices and milk to be made available to children in school.

Working Together

19. The implications of these SMRP standards and recommendations are far reaching. They will require people to work together in partnerships.

20. Examples of successful school food improvement underline the importance of school leadership and a partnership approach, from pupil participation at school level right through to local authority strategic level. Transforming school food is as much about people, skills and commitment as it is about nutrients and ingredients. Implementing the new SMRP standards will mean changes for all. Caterers will need to change their recipes and cooking practices; kitchen staff will need more time to prepare meals; local authorities, governors and school heads will need to prioritise food; parents and carers will need to support the changes; children themselves will need to choose the new options. In short, it will require a whole-school approach. The examples of successful transformations which have already been achieved have depended on all these elements being in place.

21. The transformation of school food should also create jobs. The use of more fresh, locally produced and unprocessed food will require more kitchen

¹² The panel accepts that low salt and fat savoury snacks would be suitable for vending.

staff working more hours, and will have wider benefits to local economies. This must be expected and built in to workforce planning. All staff will require training. Since so few real cooking skills have been required of many kitchen staff in recent years it will also be necessary to train many school catering staff in new techniques and skills, and to give help with menu design and procurement planning. Resources devoted to this must be a priority.

Financial Implications

22. The additional cost to local authorities, schools and parents and carers of implementing our recommendations over a three-year transition period is in the order of £167m in the first year and £159m in subsequent years. These figures are the best estimates we can make using the currently available information, and the time available to us, and they assume no increase in uptake or efficiency savings. They provide a very useful indication of the level of additional money that needs to be levered into the school meals service. In March 2005 the Department for Education and Skills (DfES) committed transitional funding of £220m over three-years to support a transformation of school meals by local authorities.

23. We estimate that over two-thirds of the estimated additional costs will go towards food on the plate and will bring expenditure on ingredients into line with the Caroline Walker Trust (CWT) recommendations. The Panel recognised that steep increases in prices to parents and carers could lead to a decrease in uptake. This could even call into question the viability of the school meals service in some areas. We are also concerned about the impact of any price increases on low-income families who sit just above the threshold for Free School Meal (FSM) entitlement. We urge the Secretary of State to take note of our concerns and investigate options for mitigating these risks.

Conclusion

24. It is time to reverse the regrettable move away from high quality standards of school food. It is time to 'turn the tables'. We believe our recommendations will lead to the consumption of healthier combinations of lunchtime foods by primary and secondary school children. This in turn will contribute towards a reduction in obesity and in the longer term reduce the chances of our young people suffering from various chronic diseases later in life. We also believe that there will be educational gains for schools and children. Further, the changes in school food which we recommend should help bring about a healthier food culture, in which young people and adults enjoy the experience of eating healthy, nutritious food together. We commend our report to the Secretary of State and to the wider public.

Panel Recommendations

The standards

Recommendation 1: The nutrient and food and drink standards proposed in this Report should be adopted and applied to the provision of school lunches (see paragraph 2.7).

Recommendation 2: Food provided at lunchtime in schools should meet the combination of nutrient and food-based standards over a period of five consecutive school days (see paragraph 2.14).

Recommendation 3: Schools should aspire to achieve the highest quality of provision, which is a hot meal, cooked on-site, from fresh and seasonal ingredients. Whilst we accept that this level of provision is not possible to achieve in all schools at present, we recommend that schools work towards this (see paragraph 2.24).

Recommendation 4: At present only the school lunch standards are statutory. The Panel recommends that pre-school and children in other settings, should be similarly protected. It recommends that the Government, as a priority, supplements these lunch standards with standards for other food and drink service provision: break-time snacks, breakfast and after school clubs (see paragraph 2.29).

Recommendation 5: The panel recommends to schools that, from September 2006, the food standards (Table 2) be applied to lunch time and that similar standards for 'processed foods'; 'confectionery and savoury snacks'; and 'drinks' be applied to tuck shops, vending and other similar food services. The panel recognises that meeting the voluntary Target Nutrient Specifications for processed foods will require some product development and therefore may take longer (see paragraph 2.30).

Recommendation 6: School caterers should ensure that choice is available for all children right through to the end of lunchtime service in order that children eating later in the food service are not disadvantaged (see paragraph 2.15).

Recommendation 7: There should be easy access to free, fresh, chilled drinking water throughout the school day (see paragraph 2.32).

Recommendation 8: The procurement of food served in schools should be consistent with sustainable development principles and schools and caterers should look to local farmers and suppliers for their produce where possible, tempered by a need for menus to meet the new nutritional standards and be acceptable in schools (see paragraph 2.25).

Recommendation 9: The standards should be reviewed in 2011. At this time the standards should be applied to food consumption as well as food provision (see paragraph 2.9).

Recommendation 10: The Department for Education and Skills (DfES) should encourage schools to adopt the voluntary target nutrient specifications circulated for consultation by the Food Standards Agency (see paragraph 2.8).

Delivering Change

Catering:

Recommendation 11: Schools and caterers should conduct a needs analysis (skills, equipment, preparation time) and train all relevant staff (including catering staff and midday supervisors) to ensure they are able to support pupils in making healthy choices (see paragraph 3.9).

Recommendation 12: Catering staff need to be central to the whole school approach. Their practical skills should be valued and utilised to the full, and they should be represented on groups like School Nutrition Action Groups (see paragraph 3.5).

Schools:

Recommendation 13: All schools should audit their current food service and curriculum, and develop, implement and publish a whole-school food and nutrition policy. The Panel recommends that schools' whole-school food policies should be made available to parents and carers and be referred to in the school prospectus and school profile (see paragraph 3.15).

Recommendation 14: All children should be taught food preparation and practical cooking skills in school in the context of healthy eating. Far more emphasis should be placed on practical cooking skills within the curriculum space currently devoted to Food Technology, and the KS3 review should consider this (see paragraph 3.14).

Recommendation 15: Supply links between local producers and schools should be strengthened, with improvements to children's knowledge about growing and cooking food. Schools should be encouraged to visit farms, ideally where some of their food is produced (see paragraph 2.26).

Recommendation 16: Whole-school food policies, developed through partnerships, should include consideration of the impact of packed lunches and food brought into school. However, where parents and carers wish to continue with packed lunches, guidance is available from the Food Standards Agency (see paragraph 2.31).

Getting started

Recommendation 17: The introduction of the new standards should be phased in over a period of time to allow the necessary preparation. Implementation will be more difficult in some schools (e.g. where there is a

cash-cafeteria food service). The new standards should be fully achieved as soon as possible, and at the latest, for all primary schools by September 2008 and for all secondary schools by September 2009 (see paragraph 3.25).

Recommendation 18: Schools and local authorities should aim for complete take-up of free school meal entitlement; and schools should aim to have at least 10% increase in school meals take-up by the end of the implementation period (see paragraph 3.26).

Recommendation 19: Further tools and guidance need to be developed, tested, and made available as early in the implementation process as possible. The DfES should take the lead on this (see paragraph 2.18).

Recommendation 20: The Food Standards Agency (FSA) should make its food composition data, including any relating to non-milk extrinsic sugars, widely available in an electronic format. This will provide information on foods and nutrients contained in the standards, expressed using analytical or calculation methods which reflect the needs of the standards (see paragraph 2.19).

Financial investment

Recommendation 21: The Secretary of State should take note of our concerns that low income families may be adversely affected by price increases, and investigate options for mitigating possible nutritional and economic risks (see paragraph 4.41).

Recommendation 22: Schools and local authorities must improve transparency and accountability in relation to how much they spend on school meals, including food cost per meal; uptake; free school meal numbers; nature of service; level of any subsidy; and any surplus generated by the service and how it is spent. This information should be presented in the whole-school food policy (see paragraph 4.7).

Recommendation 23: There should be no further degradation of service or provision by individual schools or local authorities from the current position, and kitchens should be a priority under 'Building Schools for the Future'. The DfES should undertake further work to consider the options for schools which no longer have their own kitchens. Schools and local authorities should be encouraged to reach the highest standards of provision and kitchens should be a priority in all schools' capital investment programmes (see paragraph 4.30).

Recommendation 24: Guidance on formulaic funding delivered to local authorities and schools should prioritise the renovation and refurbishment of kitchens and dining facilities (see paragraph 4.32).

Recommendation 25: The Government needs to ensure that current Private Finance Initiative (PFI) contracts and 'Building Schools for the Future' (BSF) initiatives do not impose barriers to the improvement of school food and also

ensure that in future all school PFIs incorporate building specifications which enable the main meal to be cooked on the premises and practical cooking skills to be taught to all pupils. The Government should require all partners in PFI deals to be bound by the new standards. The existence of long-term contracts cannot be allowed to adversely affect the health of pupils in PFI schools (see paragraph 4.33).

Recommendation 26: The Panel suggests that kitchens and dining areas should be given priority within primary capital investment (see paragraph 4.34).

Recommendation 27: The economic costs of the changes should be modelled against the economic benefits. For example the benefits include: sourcing more food from local suppliers will benefit local economies and cut down transport and infrastructure costs; using more fresh ingredients will require longer kitchen assistant hours and this will benefit catering staff; the possible link between better nutrition, educational attainment and associated life-time earnings gain (see paragraph 4.45).

Recommendation 28: DfES has asked all local authorities to revise their asset management plan data by the end of this year. This information should show-up deficiencies in kitchen and dining areas but will not, due to timing, reflect then standards and approach recommended in this report. We recommend that DfES should (i) consider what further work needs to be done to supplement the information gathered from current activity; (ii) use this information to ensure that kitchen and dining areas are a priority in capital spending programmes; and (iii) ensure that all future asset planning takes the new SMRP standards and approach fully into account (see paragraph 4.31)

Recommendation 29: In line with the Government's expectation that the transformation of school meals should be led by local authorities, we recommend that local level discussions recognise the desirability of phased – as opposed to sudden - price increases (see paragraph 4.43).

Recommendation 30: The Government should make school meals a priority during the Comprehensive Spending Review 2007 (see paragraph 4.44).

Monitoring and Evaluation

Recommendation 31: At appropriate intervals (eg. of 4 years) a nationwide evaluation of school food provision should be commissioned by DfES, to assess the types of foods and drinks available, their uptake and nutrient contribution to the overall diet. The evaluation should pay particular attention to provision for children who are nutritionally at risk. This evaluation should be timed for completion before the review of the standards in 2011 (see paragraph 5.23).

Recommendation 32: The main approach to external monitoring and evaluation should be through the regular inspections carried out by Ofsted. This should be supported by evidence gathered from the in-depth inspections

of a sample of schools carried out by HM Inspectors, supported by nutritionists. The Panel recommends further work should be conducted by Ofsted and DfES to use the pilot inspections planned for November 2005 to develop the methodology and a rigorous set of tools to support those inspections (see paragraph 5.16).

Recommendation 33: A checklist should be developed, as part of the package of further tools and guidance. It should be piloted to ensure it is effective in bringing about change and supporting implementation of the nutrient and food standards (see paragraph 5.10).

Recommendation 34: Local authorities should be required to collect and report annually on progress in achieving healthy school standards, provision and uptake of all (including free) school lunches, and steps being taken to work towards the achievement of school lunch standards e.g. use of nutrition software, checklists, smartcards, incorporation of standards in contracts. The DfES should collect and collate this data to provide a national overview of progress (see paragraph 5.17).

Recommendation 35: The School Food Trust should hold a database of standards compliant menus for schools to use at their discretion; and standard analysis services which would support schools in providing and analysing their own meals service (see paragraph 5.7).

1 Background

The School Meals Review Panel

- 1.1 The School Meals Review Panel was set up in May 2005, against a backdrop of increasing concern about the quality of children's diets; rapidly increasing rates of child obesity and other diet-related diseases; recent Government policies seeking real improvements in public health; and increasing popular demand for a change to school meals.
- 1.2 The Panel consisted of people from different professions and backgrounds, including headteachers, governors, school caterers, people with practical experience in implementing healthy eating initiatives in schools, registered dietitians and nutritionists, public health experts, consumer and environmental group representatives, parents and food industry.
- 1.3 The Terms of Reference of the Panel are shown in Appendix 1. They focus on the need to revise school meal standards to reduce the consumption of fat, salt and sugar; and to increase the consumption of fruit and vegetables and foods containing other essential nutrients. The Terms of Reference also asked the Panel to advise on what would need to be done practically to implement new nutritional standards, and suggested that the Panel's work should focus initially on secondary schools. In fact, it became clear early on that it made sense to consider primary schools in tandem with secondary schools. The Panel also realised that successful implementation would mean thinking about far broader issues than providing food at lunchtime in schools. These included: other food available in schools; other aspects of schools including food related-teaching; how much physical activity is encouraged in the school; food purchased outside the school at lunchtime or prepared at home and brought in; and issues such as how schools could support local economies and environmental sustainability.
- 1.4 The Panel agreed the following set of principles to guide its work:
 - The nutritional basis for school meal standards should take account of:
 - public health needs, with associated, clear, dietary recommendations;
 - practical implementation;
 - measurability and specificity to enable external monitoring;

- simplicity and transparency.
- School meals should provide a nutritional safety-net. That is:
 - they should provide good quality, nutritious food;
 - they should have a positive role in enhancing the wellbeing of all children, especially those from poorer backgrounds.
- The aim of the standards and work of the Panel should be to achieve a significant increase in the quality of the foods provided during school meals.
- The work of the Panel should include considering measures to encourage the uptake of school lunches, so that uptake is protected in the early stages, and significantly increased over the implementation period.
- The implementation of standards needs to be supported by a school environment that encourages healthy food choices throughout the day, healthy levels of physical activity, and is in the context of a whole-school approach.

1.5 The work of the Panel included considering scientific evidence relevant to developing the detail of the nutritional standards, but the more challenging task was developing a route to their successful implementation. We drew upon the experience of many people in doing this. Some of these had already worked to provide good quality and nutritious food for their children, and had seen increases in the uptake and enjoyment of school meals.

The history of school meals standards

- 1.6 The origins of the school meal service can be traced back to the work of charities in the mid-19th century. The service was born out of public concern about severe malnutrition. It was not until 1941 that the first nutritional standards for school meals were set. These laid down levels of protein, fat and calories which should be provided by a school dinner. Shortly after, the Education Act (1944) made it a duty of all local education authorities (LEAs) to provide school meals for those who wanted them, and from 1947, the full net cost of school meals was met by the Government.
- 1.7 Though the principle of a standard charge for the school meal was introduced in 1950, it was in 1967 that full financial responsibility for the school meal service passed to LEAs.
- 1.8 The Education Act (1980) removed the obligation on LEAs to 'provide a school meal suitable in all respects as a main meal of the day'. The

Act also removed the requirement to sell meals at a fixed price, and at the same time abolished nutritional standards for school meals.

- 1.9 The Act aimed to cut public expenditure on school meals, and the introduction of convenience foods was seen as a way to do this. Some LEAs dismantled their catering services. The result is that, today, some 13% of schools have no kitchen facilities, and in these schools only sandwiches are provided to those entitled to free meals.
- 1.10 In 1986, the Social Security Act limited the right to free school meals to those children whose parents received supplementary benefit. Two years later the Local Government Act (1988) introduced Compulsory Competitive Tendering (CCT), obliging all LEAs to put school meals services out to tender. The guiding principle was 'lowest bid wins', and this put economy above quality in provision of the service. Local Authority providers who won contracts were defined as Direct Service Organisations (DSOs) and private sector companies entered the market. In effect, an unregulated school meals market had been created.
- 1.11 In 1992 The Caroline Walker Trust convened an expert working group to formulate scientifically based nutritional guidelines for school meals. These were not introduced as a statutory requirement but have since been accepted as an aspirational 'gold' standard.
- 1.12 In 1998 'Fair Funding' provisions came into force in education, which meant funding for school meals was delegated to all secondary schools, creating school-level decision-making about school meals. Primary and special schools were also given the right to opt for delegation. In addition, the principle of 'Best Value' replaced CCT for public service procurement and as a result decisions about school meal provision were increasingly financially driven.
- 1.13 Concern about the nature of school meal provision grew. In April 2001, minimum nutritional standards for school lunches were reintroduced in England under the Education (Nutritional Standards for School Lunches) Regulations 2000. The Education Act 2002 later amended the free school lunch eligibility criteria, increasing the numbers of children eligible to receive free school meals.
- 1.14 In summary, standards for school meals established in the 1940s were abolished by later governments, and there was a major move from public to private sector provision of school meals. The combination of these policies resulted in severe financial pressures and the fragmentation of school catering. Together with a lack of strict standards, these factors have resulted in the type of school meal often seen today. Reversing this trend will require a determined and concerted effort from all.

Recent developments

- 1.15 Anxiety about children's diet began to emerge in the 1990's, a decade in which two Public Health White Papers¹³ were published. This provided the impetus for a number of public health initiatives with potential to influence school children.
- 1.16 The National Healthy Schools Programme was launched in 1999 by the Department for Education and Employment and the Department of Health. Within this Programme the National Healthy Schools Standard (NHSS)¹⁴ was developed to promote eight areas of activity in 'healthy schools', including healthy eating and physical activity.
- 1.17 In 2000 the NHS Plan announced the introduction of the National School Fruit Scheme (now School Fruit and Vegetable Scheme). All four to six year old children in local authority maintained infant, primary and special schools throughout England (nearly 2m children) are now eligible to receive a free piece of fruit or vegetable every school day.
- 1.18 In early 2001 DH and DfES jointly launched the Food in Schools Programme, which included a range of initiatives to assist schools across England in implementing a whole-school approach to healthy eating and drinking. This led to the development of a new website www.foodinschools.org and a 'Food in Schools Toolkit' (launched in March 2005), which provides a range of guidance and resources on healthier eating and drinking activities throughout
- 1.19 In mid-2001 a new Public Service Agreement¹⁵ target involving three government departments - the DfES, the Department for Culture, Media and Sport (DCMS) and the DH - committed these departments to achieving a halt to the year-on-year increase in the prevalence of obesity in children under 11 by 2010.
- 1.20 In 2004 the FSA published minimum food and nutrition competencies for Children aged 14-16 years olds¹⁶. This framework of competencies plays an important role in ensuring that young people develop the life skills they need and that these are embedded into the whole-school approach, particularly through the teaching of practical cooking skills in the curriculum.
- 1.21 In 2004 the Department for Education and Skills (DfES), the Department of Health (DH), the Food Standards Agency (FSA) and the Department for Environment, Food and Rural Affairs (DEFRA) published the Healthy Living Blueprint for Schools. The Blueprint set out a commitment to:

¹³ HM Government (1991) The Health of the Nation. The Stationery Office, London.

HM Government (1999) Saving Lives: Our Healthier Nation. The Stationery Office, London.

¹⁴ www.wiredforhealth.gov.uk .

¹⁵ www.hm-treasury.gov.uk/media/4B9/FE/sr04_psa_ch3.pdf

¹⁶ www.food.gov.uk/multimedia/pdfs/grubgrips.pdf

- revise secondary school meal standards, and review primary school meal standards;
- provide additional support for head teachers and governors;
- work with industry and sector skill bodies to provide better training and support for catering staff working in schools.

1.22 The November 2004 the White Paper *Choosing Health: Making healthy choices easier*¹⁷, was closely followed by three delivery plans – including *Choosing a Better Diet: a food and health action plan*¹⁸. These set out the Government’s commitment to make nutrition and physical activity essential elements of the healthy school programme from September 2005 and a vision that half of all schools will be healthy schools by 2006 with the rest working towards healthy school status by 2009, and a. In addition, *Choosing Health* and *Choosing a Better Diet* included Government’s commitment to revise primary and secondary school meal standards and strongly consider introducing nutrient-based standards and, subject to legislation, to extend new standards to cover food served in school across the school day in secondary schools;

1.23 Following this, DH and DfES jointly launched the Food in Schools programme to assist schools across England in implementing a whole-school approach to healthy eating and drinking.

1.24 In March 2005, the DfES announced a number of additional measures¹⁹ to improve food in schools, including training school catering staff in healthy eating, and the inclusion of school food in the Ofsted inspection programme. It was at this point that the Secretary of State for Education announced the School Meals Review Panel, and shortly afterwards the DfES produced draft guidance on procuring a school meals service for use by Headteachers and Governors²⁰. In June 2005, the National Governors Council and FSA published a framework to support the role that school governors play in developing food policy within schools²¹.

1.25 Also announced in March 2005 was the School Food Trust, a new Non-Departmental Public Body whose role would be to give independent support and advice to schools and parents to improve the standard of school meals.

1.26 Sustainable food production has also been a central concern, and the Government’s Public Sector Food Procurement Initiative, managed by the Department of Environment Food and Rural Affairs (DEFRA)²²

¹⁷ Government (2004): *Choosing Health: Making healthy choices easier. White Paper.*

¹⁸ Department of Health (2005): *Choosing a Better Diet: a food and health action plan.*

¹⁹ www.dfes.gov.uk/pns/DisplayPN.cgi?pn_id=2005_0044

²⁰ www.teachernet.gov.uk/wholeschool/healthyliving/foodanddrink

²¹ www.tmmuk.com/ngc/document_link.asp?id=67

²² Integrating Sustainability into School Meals, Food Procurement Unit, Department of Environment, Food and Rural Affairs

encourages public sector bodies to procure food and catering services in a manner that promotes sustainable development. Key objectives include increasing tenders from small and local producers, increasing the consumption of healthy and nutritious food, and reducing the environmental impacts of production and supply. Related objectives include increasing the demand for organic food and reducing waste. Since approximately £360 million is spent on food served in schools – about 20% of the £1.8 billion spent by the public sector in England on food and catering - it is critical that school meals support sustainability.

The nutrition of school aged children

1.27 Seventy years ago some children were malnourished, for example with rickets and stunted growth. The emphasis was on ensuring that everyone had enough to eat.

1.28 Eating and physical activity patterns have changed dramatically. Children's diets now contain too much saturated fat, sugar and salt; and too few fruits and vegetables, and foods containing essential vitamins and minerals. At the same time their rates of physical activity have fallen substantially. This current unbalanced diet and low activity lifestyle of many children can affect their health profoundly, with both short and long-term effects. Short-term effects include:

- high levels of obesity, with overweight children sometimes suffering social and psychological problems;
- anaemia as a consequence of eating relatively low amounts of iron in the diet;
- tooth decay related to frequent consumption of sugary foods and drinks;
- increasing evidence that poor diet may affect concentration in the classroom and academic performance²³.

1.29 The long term effects of poor diet in childhood can include an increased risk of some cancers, heart disease and stroke; a greater likelihood of developing diabetes; and the prospect of poor bone health in later life because of the influence of low calcium and Vitamin D intakes in childhood.

1.30 Appendix 2 gives details about key nutrients and foods in the diet, and how much of these children are currently eating. The following facts and figures show why health experts are worried by the present situation:

- Levels of obesity in children have been escalating. 1 in 5 boys

²³ Note: the Food Standards Agency has commissioned a systematic review of relevant research

and 1 in 4 girls were obese or overweight²⁴ in 2002²⁵. The British Medical Association²⁶ says that conservative estimates are that 1 in 5 boys and 1 in 3 girls will be in the obese category by 2020.

- 3 out of 10 boys and 4 out of 10 girls do not have the recommended minimum of 1 hour a day physical activity²⁷. Levels decrease with age, especially among teenage girls.
- Sugars provided about 17% of food energy in children's diets²⁸, compared to a recommended average of 11%. The main source was fizzy soft drinks, followed by chocolate and other confectionery.
- The most recent national survey indicated that children were eating about a third less fibre than the recommended amount for adults.
- The average proportion of food energy from saturated fats eaten by children in the most recent national survey was just above 14%, compared with the recommendation of 11%.
- Most people consume more sodium than is needed.²⁹ The latest information shows that usual levels of salt intake are high for both adults and children. For adults, average intake is two and a half times the recommended amount. On a body weight basis, the average salt intake of children is higher than that of adults.
- 19% of 15 to 18-year-old girls had intakes of calcium which were at a level which was likely to be inadequate
- 50% of 15 to 18-year-olds and 45% of 11-14 year old girls had iron intakes which were at a level which was likely to be inadequate^{28 30}. Low iron status was also evident in some older girls, which is of concern as anaemia during pregnancy is associated with lower birth weight and associated problems.
- Children eat on average less than half of the recommended 5 portions of fruit and vegetables a day, with 1 in 5 eating no fruit at all during the survey week

²⁴ Definitions of overweight and obesity in children. 1) Details for children aged 2-12 years are given in Cole TJ et al (2000) Establishing a standard definition for child overweight and obesity worldwide: international survey. *BMJ* **320**:1240-3. 2) Children 12 -18 years: overweight defined as BMI index of > 25, and obesity as BMI index of > 30 kg/m

²⁵ Department of Health. Health Survey for England 2002

²⁶ British Medical Association (2005) Preventing childhood obesity. BMA, London.

²⁷ Health Survey for England 2002

²⁸ Gregory J., Lowe S., Bates C.J., Prentice A., Jackson L.V., Smithers G., Wenlock R. & Farron M. (2000) National Diet and Nutrition survey: Young People aged 4-18 years. The Stationery Office., London.

²⁹ Scientific Advisory Committee on Nutrition (2003) Salt and Health. The Stationery Office, London.

³⁰ i.e. below the Lower Reference Nutrient Intake

The role of school meals in the nutrition of children

1.31 The most up-to-date picture of school meals in secondary schools comes from a national survey of 79 schools covering 5,695, 11-18 year old children³¹. It shows the challenge which the present state of school meals represents. Key findings include:

- Many schools followed healthy cooking practices (e.g. using unsaturated fats for cooking, using semi-skimmed milk), but only a minority followed other healthy practices (e.g. 15% restricted access to table salt, 17% used low fat spreads in sandwiches). 99% of schools fried their chips, rather than preparing oven chips.
- By the end of mealtimes, only 47% of schools were still meeting the current nutritional standards for school meals.
- Chips and other potatoes cooked in oil were served in 76% of schools on 4 or more days, high fat main dishes such as burgers and chicken nuggets in 86%. In 28% of schools, no fruit juice was served.
- Only 7% of schools provided set meals over the course of 1 week that met 8 or more of 12 voluntary nutrient based guidelines (Caroline Walker Trust, 1992). The guidelines which meals were most likely to fail were for iron, calcium and percent energy from carbohydrate (starchy foods)
- In catering contracts, the language was worthy and indicated a strong commitment to healthy eating, but failed to specify tight contractual structures to ensure healthier food provision and choice. There was very little about controlling the salt content of school meals, access to salt by pupils, or the prevention of obesity.
- 48% of pupils chose high fat main dishes (e.g. burgers), 48% chose chips and other potato products cooked in oil, 45% chose soft drinks and 24% chose cakes or muffins. The least popular choices were fruit (2%), fruit juice (3%), and vegetables and salads (6%).
- Only a quarter of head cooks/catering managers or their staff had received training in healthy eating or cooking in the past 12 months, but where staff had had training on healthy eating or cooking, pupils tended to choose lower fat main dishes more often.

³¹ Nelson M., Bradbury J., Poulter J., Mcgee A., Msebele S. & Jarvis J. (2004) School Meals in Secondary Schools in England. Food Standards Agency, London.

- The majority of head cooks and catering managers could not name three or more of the current National Nutritional Standards for school meals.

School meals as a ‘safety net’

1.32 The benefits of free school meals are substantial. Within low-income families children cannot always rely on healthy, nutritious meals at home. Appendix 3.2 shows clearly the importance of free school lunches in contributing to the nutritional quality of the diets of these children. It also shows the poor nutritional quality of the remainder of the diets of these children - for many of them the school meal is the ‘safety net’, the one meal of the day that they can rely on. In addition the free school meal (FSM) is of substantial financial benefit as well being worth approximately £300 per child per year. However, only four children in five who are entitled to a free school meal, actually take it³².

Educating for health: whole-school policies

1.33 Evidence heard by the Panel indicates that the most successful way of bringing about significant changes to the picture set out above is for schools to develop ‘whole-school’ food and nutrition policies. These policies cover the operation of the food service, the food curriculum and appropriate aspects of the pastoral care system. They create opportunities for children to learn about food and nutrition, including the importance of sustainable production, and to gain social and practical food skills needed for their lives ahead. The benefits for schools, pupils, parents, and caterers of such an approach do not stop at improvements in health and welfare. If school food services and their organisation are perceived as good by parents and carers and pupils, this can have a beneficial impact on their views of the rest of the school.

1.34 The development and implementation of whole-school food and nutrition policies needs to involve those who:

- Commission services - head teachers and governors;
- Supply the service – catering staff;
- Use the service – pupils and parents and carers;
- Educate children about food and nutrition – teachers.

³² Local Authority Caterers Association Survey, 2004

- 1.35 The success of this approach has been demonstrated both by scientific evidence³³ and by the experiences of many individual schools.
- 1.36 Structured approaches, like those provided by establishing groups such as School Nutrition Action Groups (SNAGs)³⁴, can provide the impetus for change. They can help schools to:
- Link the taught curriculum with food provision throughout the day;
 - Encourage a health-promoting environment in the school;
 - Give pupils the opportunity to be engaged, voice opinions and exercise influence;
 - Market and promote the whole school policy and the food service to parents and carers;
 - Establish and monitor a consistent food and nutrition policy which has the health and welfare of children as its focus;
 - Audit existing practice in the taught curriculum and the food service;
 - Monitor free school meals to ensure maximum uptake against entitlement;
 - Engage in active, enthusiastic promotion of the school food service to parents and carers and pupils;
 - Organise the lunch hour to allow for a civilised eating environment;
 - Ensure high quality supervision of a sensitive and supportive nature by voluntary teaching staff or by appropriately trained support staff;
 - Develop well-planned, customer-friendly management and administration of rotas and queuing systems; and
 - Have a clear policy on 'healthy vending' and on access by commercial food vans to school premises in the vicinity.

³³ International Union for Health Promotion and Education (2000) The Evidence of Health Promotion effectiveness. In *Report for the European Commission*. International Union for Health Promotion and Education, Vanves, France.

Lister-Sharp D., Chapman S., Stewart-Brown S. & Sowden A. (1999): Health promoting schools and health promotion in schools: two systematic reviews. *Health Technology Assessment* **3**.

Roe L., Hunt P., Bradshaw H. & Rayner M. (1997) Health promotion interventions to promote healthy eating in the general population; a review. Health Education Authority, London

³⁴ www.healthedtrust.com – see 'Chips Are Down' ,

2 The Way Forward for Food in Schools

The development of mandatory nutrition standards for school lunches

2.1 The Panel considered that setting standards to improve the nutritional quality of school meals was central to transforming catering service provision in schools. It went through a lengthy and careful process, in order to develop the recommended standards. This process is summarised below, and more detailed information is provided in the Appendices.

- **Stage 1:** We identified different options for setting school standards, by looking at what other countries have done, and historical experience (Appendix 3.1)
- **Stage 2:** We looked at the strengths and weaknesses of the main options, and in the light of this recommended that the new standards should be based on both key nutrients and key foods in the diet.
- **Stage 3:** We decided that rather than begin from scratch in developing this type of standard, we would take recently published Caroline Walker Trust (CWT) guidelines³⁵, and look at them carefully to assess whether:
 - The nutrients and foods included were appropriate in terms of children and public health;
 - The list of nutrients and foods included could be simplified in any way, since some key nutrients might be from common food sources;
 - The way in which nutrients were expressed was appropriate in terms of practical implementation, and monitoring;
 - There was a need for standards to improve school meals with regard to their contribution to a healthy, balanced diet
 - Any additional requirements should be included in the mandatory standards.
- In addition to the issues raised by the CWT guidelines, the Panel also considered:

³⁵ Crawley H. (2005) Eating Well at school: Nutritional and practical guidelines. Caroline Walker Trust, London.

- Whether there are there groups of children who are particularly nutritionally vulnerable, and for whom it might be appropriate to make recommendations on eligibility for free school lunches or other measures
- 2.2 Discussions on these issues are detailed in Appendix 3.2. As a result of these discussions the Panel decided to use the Caroline Walker Trust guidelines as the foundation for the new nutrient-based standards, supported by food-based standards.

Summary of recommended SMRP nutrition standards for school lunches

- 2.3 We recommend 14 nutrient-based standards and 9 ‘food’-based standards.
- 2.4 Some of the ‘food’-based standards are associated with direct health benefit, for example the requirement for fruit and vegetables, oily fish and water to be provided. Others are intended to support the achievement of the nutrient- based standards, for example restrictions on deep frying, and the sale of confectionery and snacks. Some elements, for example the restriction on reconstituted products made from meat “slurry,” are included to contribute to increasing the quality of the food provided. More details of the rationale are given in Appendix 3.2.
- 2.5 Tables 1 and 2 summarise the standards. More information about how these standards are intended to be used is provided in Section 2.3.

Table 1: Summary of recommended SMRP nutrient standards for school lunches in England

This table summarises the proportion of nutrients that children and young people should receive from a school lunch. The figures are for the recommended nutrient content of an average lunch over five consecutive school days.

Nutrient Standards	
Energy	30% of the estimated average requirement (EAR) ³⁶ This standard is linked to the recommendation that schools need to promote healthy levels of physical activity
Protein	Not less than 30% of reference nutrient intake (RNI)
Total carbohydrate	Not less than 50% of food energy
Non-milk extrinsic sugars	Not more than 11% of food energy
Fat	Not more than 35% of food energy
Saturated fat	Not more than 11% of food energy
Fibre	Not less than 30% of the calculated reference value <i>Note: calculated as Non Starch Polysaccharides</i>
Sodium	Not more than 30% of the SACN ³⁷ recommendation
Vitamin A	Not less than 40% of the RNI
Vitamin C	Not less than 40% of the RNI
Folate/folic acid	Not less than 40% of the RNI
Calcium	Not less than 40% of the RNI
Iron	Not less than 40% of the RNI
Zinc	Not less than 40% of the RNI

EAR = Estimated Average Requirement – the average amount of energy or nutrients needed by a group of people. Half the population will have needs greater than this, and half will be below this amount

RNI = Reference Nutrient Intake – the amount of a nutrient which is enough to meet the dietary requirements of about 97% of a group of people

SACN = Scientific Advisory Committee on Nutrition

Note : For details of figures for the dietary reference values and derived amounts for nutrients for children and young people see Crawley (2005), with the exception that the derived reference value for fibre for boys aged 15-18 years should be capped at 18g..

³⁶ Nutrient values except for sodium are based on: Department of Health (1991) Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. London: HMSO

³⁷ Scientific Advisory Committee on Nutrition (2003) Salt and Health. London: The Stationery Office

Table 2 : Summary of recommended SMRP food standards for school lunches in England

Food Standards	
Fruit and vegetables	Not less than 2 portions per day per child, at least one of which should be salad or vegetables, and at least one of which should be fruit
Oily fish	On the school lunch menu at least once every 3 weeks
Deep fried products	Meals should not contain more than two deep fried products in a single week
Processed foods ¹	Should not be reformed/reconstituted foods made from “meat slurry”
Bread (without spread)	Available unrestricted throughout lunch
Confectionery and savoury snacks ²	Not available through school lunches
Salt/highly salted condiments	Not available at lunch tables or at the service counter
Drinks	The only drinks available should be water (still or fizzy), skimmed or semi-skimmed milk, pure fruit juices, yoghurt and milk drinks with less than 10% added sugar, or combinations of these (e.g. smoothies)
Water	Easy access to free, fresh, chilled drinking water

¹ Schools should also aim to adopt the Food Standard Agency’s voluntary Target Nutrient Specifications³⁸

² Definitions in Appendix 3.4.

2.6 The figures in Table 1 express nutrients in scientific terms, for example as percentage of energy, or of Reference Nutrient Intakes. This is done as a basis for calculating figures for boys and girls, and for different ages of children. Table 3 shows the average nutrient intakes which menus should supply for lunches over a period of 1 week for mixed primary and secondary schools. More detailed tables will be needed for example for single sex secondary schools, and these have already been calculated by the Caroline Walker Trust

Table 3: Average nutrient intakes which menus should supply for lunches over a period of 1 week for groups of mixed gender children in primary and secondary schools.

	Max or Min value	Primary Pupils 5-11 years ¹	Secondary Pupils 11-18 years ²
Energy kcals		557	646
Fat g	MAX	21.6	25.2
Saturated fat g	MAX	6.8	7.9
Total carbohydrate g	MIN	74.2	86.1
Non-milk extrinsic sugars g	MAX	16.3	18.9
Fibre g	MIN	4.5	5.1
Protein g	MIN	8.5	13.3
Iron mg	MIN	3.5	5.9
Zinc mg	MIN	2.8	3.7
Calcium mg	MIN	220	400
Vitamin A µg	MIN	200	250
Vitamin C mg	MIN	12	14.6
Folate µg	MIN	60	80
Sodium mg	MAX	600	710

The Panel recommends that:

- 2.7 The nutrient and food and drink standards proposed in this Report should be adopted and applied to the provision of school lunches. (Recommendation 1)**
- 2.8 The Department for Education and Skills (DfES) should encourage schools to adopt the voluntary target nutrient specifications circulated for consultation by the Food Standards Agency.³⁸ (Recommendation 10)**
- 2.9 The standards should be reviewed in 2011. At this time the standards should be applied to food consumption as well as food provision (Recommendation 9)**

How the standards are intended to be used in schools.

- 2.10 Once the standards were agreed the Panel went on to consider recommendations on how the standards should be applied to lunchtime services in schools.
- 2.11 The standards are intended to be applied to **all** food provided in school cafeterias and dining rooms at lunch time (i.e. not just to set menus). They are not, however, designed to be applied to the individual meal or child. The implementation framework should also include work to encourage uptake of healthier options. This means that in the longer term, standards should be applied to food actually consumed.
- 2.12 Examples of menus which comply with the recommended SMRP standards are shown on pages 32 and 33. These menus give some idea of what a food service which meets the standards might look like. Very many menus like these can be constructed and tailored to meet the individual needs of a school. The examples shown are merely designed to illustrate the principles of menu planning to meet the standards. For example, the sample menus incorporate a large proportion of fruit, vegetables and foods which are rich in starch, vitamins and minerals. Confectionery and pre-packaged savoury snacks do not appear. Whilst there are very familiar meals included within the mix, there are also foods which some children have may not yet have learned to like. For some schools, these menus will represent a huge cultural shift; others will be very used to seeing children enjoying similar meals. School caterers will be the vital link in helping children change their attitudes towards consuming a lunch of this type.

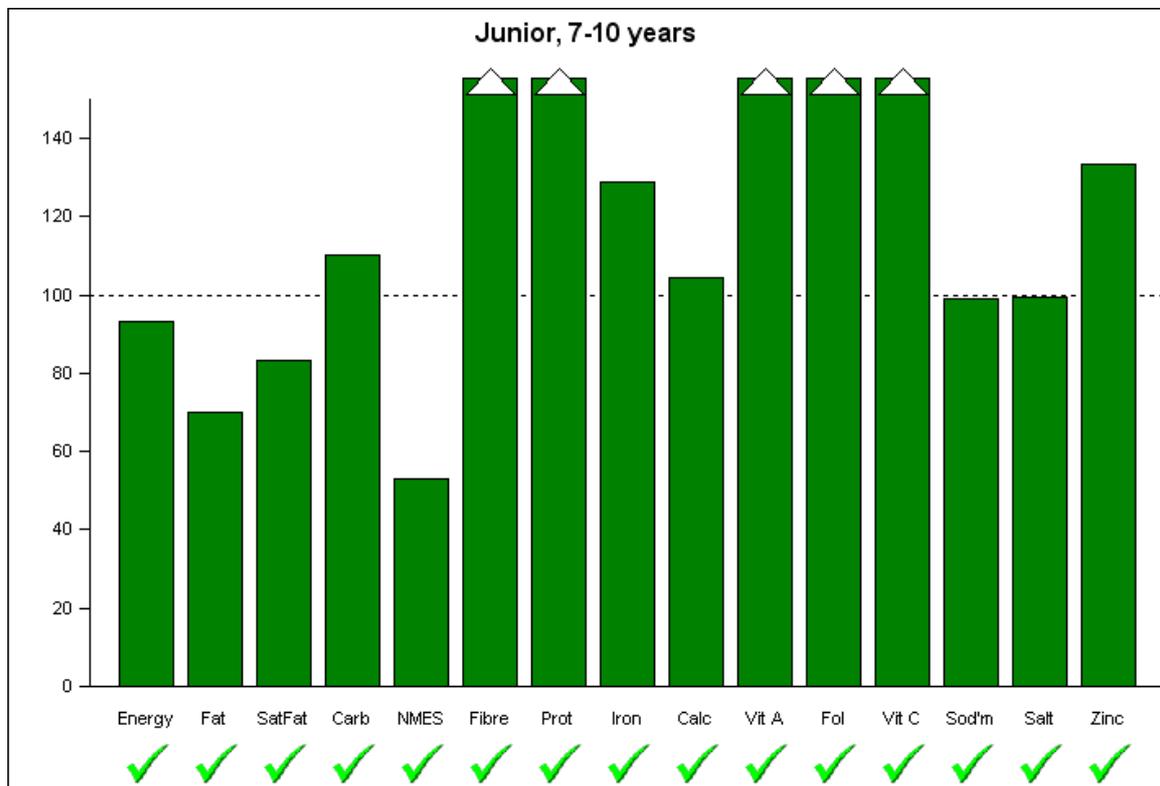
³⁸ The Food Standards Agency issued a detailed consultation on draft target nutrient specifications for manufactured foods used in school meals throughout the UK, in July 2005. Responses have been requested by October 2005. Details are provided in Appendix 3.3.

2.13 The sample menus have been analysed using typical school portion sizes and recipes. Some of the recipes have been developed to use healthier ingredients and cooking methods. The accompanying bar charts show the results of this analysis. The dotted line represents the standard level. Some components (fat, saturated fat, NMES and sodium/salt) should be below the dotted line. The others should be above the standard level.

Junior menu, 7-10 years					
	Monday	Tuesday	Wednesday	Thursday	Friday
Main dishes	Cheese and tomato pizza Vegeburger	Chicken and broccoli lasagne Vegetable risotto	Roast lamb with minted gravy Vegetable curry	Savoury minced beef Vegetable bolognese	Salmon fishcakes Mexican beans
Starchy dishes	Jacket wedges Soft noodles	Baguette	Roast potatoes Basmati rice Chapati	Spaghetti Jacket potato	Boiled new potatoes Tortilla wrap
Vegetables	Sweetcorn and peas Cucumber and carrot sticks	Carrots Cherry tomatoes and coleslaw	Lentil dahl French beans	Mixed salad Broccoli florets	Baked beans Roasted vegetables
Fruit and Desserts	Fruit salad Banana and chocolate brownie	Ice cream and fruit Oat cookies	Apple and blackberry crumble Greek yoghurt Pears	Apricot conde Jellied fruit salad	Fruit squares Orange and lemon rice
Drinks	Water	Water	Water	Water	Water

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Junior Menu - Compares results of menu analysis with SMRP nutrient standards



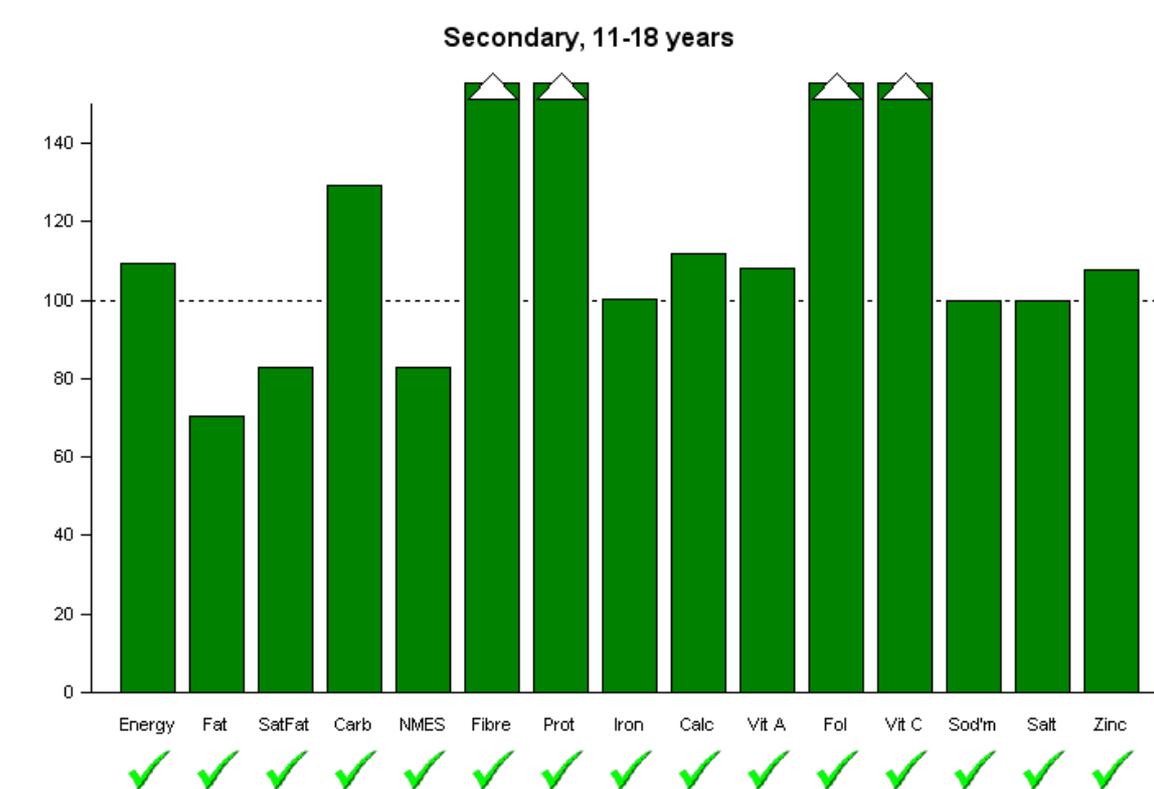
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Sample Senior Menu – 11-18years (which meets SMRP standards)

	Monday	Tuesday	Wednesday	Thursday	Friday
Main dishes of the day	Beef curry Vegetable and bean curry	Pork calypso and tomato quiche	Spicy chicken risotto Vegetable lasagne	Lamb and pasta medley Caribbean casserole	Salmon fishcakes Spicy vegetable burgers
Daily choices	Lamb burgers, Quorn burgers, Chicken fajitas, Cheese & tomato pizza, Chilli tortillas				
Starchy dishes	Brown rice Chapati	Jacket wedges Pasta twirls	Ciabatta rolls Rice & peas	Boiled new potatoes Couscous	Chips
Vegetables	Lentil dahl Vegetable curry Mixed salads	Baked beans Peas Mixed salads	French beans Mixed salads	Broccoli florets Roasted vegetables Mixed salads	Coleslaw Cauliflower gratin Mixed salads
Jacket potatoes	Jacket potato with choice of tuna, baked beans or cheddar cheese				
Choice of breads rolls and fillings	Choice of bagels, pitta bread, granary, ciabatta and crusty brown rolls, tortilla wraps, burger buns Choice of fillings - egg and cress, tuna and cucumber, smoked mackerel, ham and tomato, chicken tikka				
Fresh fruit, yoghurt and desserts	Daily selection of fresh fruits and yoghurts				
	Apricot oat bars Banana custard	Jelly yoghurt whip Apple Brown Betty	Apple and blackberry crumble & custard Rice pudding with sultanas	Spiced apple cake Pineapple & crème fraiche	Ice cream and fruit Banana and chocolate brownie
Drinks	Choice of semi-skimmed milk, flavoured milks and water				

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Secondary Menu (Compares results of menu analysis with SMRP nutrient standards)



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The Panel recommends that:

2.14 Food provided at lunchtime in schools should meet the combination of nutrient and food-based standards over a period of five consecutive school days. (Recommendation 2)

2.15 School caterers should ensure that choice is available for all children right through to the end of lunchtime service in order that children eating later in the food service are not disadvantaged. (Recommendation 6)

2.16 The standards need to be supported by practical, food-based guidance and by tools to enable caterers and schools to achieve them. Account will need to be taken of children on special diets, those with allergies, or with beliefs or cultural practices which affect dietary patterns. Some guidance of this type is provided in Appendix 4.1. Practical support can be found in a variety of resources including Catering for Health³⁹ and Eating Well at School⁴⁰. The Hungry for Success⁴¹ programme in Scotland has also developed guidance on portion sizes which are shown in Appendix 4.2.

2.17 The standards also need to be supported by easily accessible software which is 'fit for purpose', and which will enable caterers to generate menus which are in line with the standards. Much software of this type is already available.

The Panel recommends that:

2.18 Further tools and guidance need to be developed, tested, and made available as early in the implementation process as possible. The DfES should take the lead on this. (Recommendation 19)

2.19 The Food Standards Agency (FSA) should make its food composition data, including any relating to non-milk extrinsic sugars, widely available in an electronic format. This will provide information on foods and nutrients contained in the standards, expressed using analytical or calculation methods which reflect the needs of the standards. (Recommendation 20)

³⁹ Food Standards Agency, Department of Health (2002) Catering For Health, London: The Stationery Office

⁴⁰ Crawley, H (2005) Eating Well at School, Nutritional and Practical Guidelines, Caroline Walker Trust and National Heart Forum

⁴¹ Scottish Executive (2002) Hungry for Success: A Whole School Approach to School Meals in Scotland. The Stationery Office, Edinburgh.

Social, cultural and environmental aspects of the standards

- 2.20 Finally, although the standards themselves are largely based on nutrition, there are other aspects of the school meal which the Panel considered to be important. These include social and cultural considerations, and environmental sustainability. Arising from this wider debate the Panel made some additional recommendations.
- 2.21 In relation to the issue of using local food where possible, there are ways in which local food can be bought for catering services, without infringing EU regulations on procurement. Useful approaches to achieve this have been summarised in two background documents.^{42 43}
- 2.22 The Panel agreed that the aspiration for school lunches should be a hot meal, cooked on the premises from fresh and seasonal ingredients. As well as the other benefits already mentioned, this has the potential to reverse the drift away from eating meals to snacking; to halt the trend of removing kitchens and their staff from schools; and to support local and sustainable food production.
- 2.23 There is also huge scope for linking sustainable food procurement with improved education for children about where food comes from. Caterers should use local, seasonal and organic foods wherever possible to support the development of supply chains, and should ensure that the training for school catering staff includes information on seasonal, local and organic food.

The Panel recommends that:

- 2.24 Schools should aspire to achieve the highest quality of provision, which is a hot meal, cooked on-site, from fresh and seasonal ingredients. Whilst we accept that this level of provision is not possible to achieve in all schools at present, we recommend that schools work towards this. (Recommendation 3)**
- 2.25 The procurement of food served in schools should be consistent with sustainable development principles and schools and caterers should look to local farmers and suppliers for their produce where possible, tempered by a need for menus to meet the new nutritional standards and be acceptable in schools. (Recommendation 8)**
- 2.26 Supply links between local producers and schools should be strengthened, with improvements to children's knowledge about growing and cooking food. Schools should be encouraged to visit farms, ideally where some of their food is produced. (Recommendation 15)**

⁴² Morgan and Morley (2002) Relocalising the Food Chain. Cardiff University.

⁴³ Sustain (2003) Good Food on the Public Plate: A manual for sustainability in public sector food and catering

Other School Food

- 2.27 Although the Panel concentrated on school lunches, it was soon clear in our discussions that these could not be considered in isolation from other food available in schools, or which children bring into school. The availability of other foods in school, whether from vending machines or 'tuck shops', or from breaktime 'lunch boxes', clearly has an impact on what children might choose to buy and eat at lunchtime. If the Panel's hope that there will be an increase in the uptake of healthy school lunches, is to be realised, then other food outlets in school will need to be properly controlled. Similarly, the nature of breaktime snacks brought from home will need to be reviewed. Access to other foods has an effect on the likely long term success of increasing the number of school lunches eaten.
- 2.28 In order to look at appropriate breakfast provision more closely, the Panel carried out further analyses of national survey data (Appendix 3.2). These showed that a higher proportion of children receiving free school meals (FSM) and living in poor households are less likely to eat breakfast, or one including cereal, compared with children not in receipt of FSM or in better-off households not in receipt of benefit. They also showed that eating breakfast, particularly cereal (low in sugar and salt) with milk, is an important component of children eating a nutritionally balanced diet. Equally important, there appeared to be an interaction with the quality of school lunches chosen, with those children who did not eat breakfast also eating a nutritionally poorer quality school lunch. The net effect is that school meals make a greater contribution to nutrient intake in those not eating breakfast, compared to those who do eat breakfast

The Panel recommends that:

- 2.29 At present only the school lunch standards are statutory. The Panel recommends that pre-school and children in other settings should be similarly protected. It recommends that the Government, as a priority, supplements these lunch standards with standards for other food and drink service provision: break-time snacks, breakfast and after school clubs. (Recommendation 4)**
- 2.30 The panel recommends to schools that, from September 2006, the food standards (Table 2) be applied to lunch time and that similar standards for 'processed foods'; 'confectionery and savoury snacks'; and 'drinks' be applied to tuck shops, vending and other similar food services. The panel recognises that meeting the voluntary Target Nutrient Specifications for processed foods will require some product development and therefore may take longer. (Recommendation 5)**
- 2.31 Whole-school food policies, developed through partnerships, should include consideration of the impact of packed lunches and food brought into school. However, where parents and carers wish to continue with packed lunches, guidance is available from the Food Standards Agency. (Recommendation 16)**
- 2.32 There should be easy access to free, fresh, chilled drinking water throughout the school day. (Recommendation 7)**

3 Delivering Change

School Catering: The starting point

3.1 Section 1.2 of this Report described the history of school meal standards, and outlined some broader changes affecting school meals. The result of these changes is that there are several current options for schools procuring catering services:

- Schools are part of a group contract organised by their local authority with catering then provided by a local authority in-house provider or by a private sector contractor;
- Schools employ their own staff directly to deliver the catering service;
- Schools tender their catering individually to a private sector contractor or a local authority in-house provider.
- Schools and local authorities who have closed their school lunch services provide the minimum legal requirement of a sandwich meal to those with an entitlement to free school meals.

3.2 The style of service also differs between primary and secondary schools. Broadly, the picture is as follows:

- Primary schools generally offer a set-price, two course, set meal with some limited choice in each course which can be:
 - cooked and served on site where schools have a kitchen;
 - regenerated where there is no kitchen and space allows;
 - cooked in a local school and transported hot to a school with no kitchen.
- Secondary schools generally have a kitchen on site where a cash cafeteria service is offered with items priced individually.

3.3 Another part of the backdrop is that, in the last 25 years, the size, composition and job content of the school meals workforce has changed beyond recognition. It has been estimated that 50,000 school meals jobs were lost between 1980 and 1983⁴⁴. Levels of part-time

⁴⁴ Kelliher,C and McKenna,S Employment implications of government policy: a case study of public sector catering. Employment Relations, 1988,10:2

and casual employment have increased, and pay and conditions of service have worsened under competitive pressures.

- 3.4 While there are examples of talented staff still using their cooking skills to prepare food from scratch, most school catering staff are cooking or re-heating pre-prepared foods. Real cooking skills are seldom required and have often been lost, and the Panel heard that many staff are demotivated.

The Panel recommends that:

- 3.5 Catering staff need to be central to the whole school approach. Their practical skills should be valued and utilised to the full, and they should be represented on groups like School Nutrition Action Groups. (Recommendation 12)**

School Catering: Training for Change

- 3.6 For a transformation in catering to happen, both catering staff and managers need to feel and be a valued part of their school communities. This involves their being provided with training to give them the new skills they need.
- 3.7 The following is recommended as a minimum training standard, and supports existing training:-
- All catering staff
 - Stage 1 training which would encompass food safety, knife skills, vegetable and fruit preparation and cooking methods which impact on nutrition.
 - All catering staff except general assistants
 - Stage 2 training which should cover craft skills in preparing recipe dishes including meat, fish, vegetarian and sauces.
 - Heads of kitchens, deputies and those who wish to develop further
 - Stage 3 training which should encompass supervisory food safety, menu planning and marketing skills as well as more advanced large scale cookery.
 - The head of kitchen (at the very least) is recommended to undertake a nutritional qualification encompassing practical use of the standards.

- Catering Management
 - Skills to use the standards correctly, analyse menus, and advise their school based staff appropriately.

3.8 Catering providers should know about good training practice and make sure that everyone they employ has a personal training plan. It is recognised that some providers have well-established training schemes, and if these are not already accredited they are advised to consider this.

The Panel recommends that:

3.9 Schools and caterers should conduct a needs analysis (skills, equipment, preparation time) and train all relevant staff (including catering staff and midday supervisors) to ensure they are able to support pupils in making healthy choices. (Recommendation 11)

Schools

- 3.10 Paragraph 1.33 describes the need for partnership working between teachers, children, parents and carers, governors and caterers, and the importance of schools developing whole-school food policies if they are to transform school lunches. The section also describes the usefulness of initiatives like School Nutrition Action Groups.
- 3.11 In the context of considering the benefits of a whole-school approach to school lunches, the Panel also reviewed curricular and leadership issues. The Panel was clear that school meals could not be considered in isolation. Details are provided in Appendix 6 of the Panel's review of opportunities within the curriculum for teaching relating to food and nutrition.
- 3.12 The Panel is convinced that cooking is an essential life-skill and that no child should leave school unable to cook for themselves. It is also desirable for children to have a practical understanding of where food comes from, and how it is produced and treated. Whilst a purely academic knowledge of food may also be valuable, the focus at primary and Key Stages 2 and 3 should be on practical cooking skills.
- 3.13 The Panel was also clear that transforming school food and pupils' attitudes to food was a significant challenge. It should not be left to catering staff. This Panel concluded that a member of the school leadership team should be nominated to drive forward changes to

school food, and to lead the development of whole-school food policies.

The Panel recommends that:

3.14 All children should be taught food preparation and practical cooking skills in school in the context of healthy eating. Far more emphasis should be placed on practical cooking skills within the curriculum space currently devoted to Food Technology, and the KS3 review should consider this. (Recommendation 14)

3.15 All schools should audit their current food service and curriculum, and develop, implement and publish a whole-school food and nutrition policy. The Panel recommends that schools' whole-school food policies should be made available to parents and carers and be referred to in the school prospectus and school profile. (Recommendation 13)

3.16 Evidence from the experience of teachers and caterers heard by the Panel made it clear that there were different issues for primary and secondary schools when it came to improving school lunches.

3.17 Primary schools are – in general - smaller and more intimate than secondary schools, with a stronger culture of social management. The usual primary school framework for school lunches described above places less emphasis on free choice of foods than is customary in secondary schools. The Panel considered that implementing new school meal standards in primary schools should, in principle, be relatively straightforward.

3.18 In secondary schools, however, there is an almost universal cash-cafeteria culture, with little or no effort to manage pupil food choice. Indeed, evidence from Nelson et al 2005 indicates that many secondary pupils opt for unhealthy combinations of food from the cafeteria, and deliberately avoid healthier foods. However, the Panel also heard evidence that where there has been strong and committed leadership from school leaders and governing bodies, appropriate consultation with parents, carers and pupils, and effective training for school meals staff, secondary schools have been able to transform their cultures to ones which actively support healthy eating and where pupils will choose and enjoy healthy foods.

3.19 These cultural differences between primary and secondary schools led directly to the recommendation in Paragraph 3.21, that there should be different timescales for change in the two main phases of schooling.

3.20 The Panel also heard evidence from the joint DfES and DH Healthy Schools initiative. It was concerned that the present standards and

structure of the initiative may not be adequate to meet the transformational needs of the future and are pleased that there is now a drive to improve consistency and rigour. The Panel supports the inclusion of the SMRP standards in the National Healthy Schools Standard (NHSS) criteria.

A phased programme for change

3.21 Evidence presented to the Panel about the transformation process made it very clear that a sudden change to food in schools could lead to a decline in the take-up of meals, which is currently around 43% nationally. Countering any decline needs strong marketing and support for change. Developing and changing cultures in schools takes time and careful planning, and as far as school meals are concerned this will mean explaining the changes carefully to parents and carers and pupils and negotiating the changes sensitively with all staff. In the light of this, the Panel proposed that the implementation of new school meals standards from September 2006 should be followed by a two-year development period (2006-2008) in primary schools, and a three year development period (2006-2009) in secondary schools. By the end of these periods, schools would be expected to be meeting the new standards in full.

3.22 By September 2006, schools must meet all of the food standards in Table 2 across the whole day. This means that schools must:

- remove all drinks, confectionery, and pre-packaged savoury snacks which do not meet the standards;
- not serve reformed/reconstituted foods made from "meat slurry"; and should not provide processed foods which do not meet the Food Standards Agency's voluntary Target Nutrient Specifications, though the panel recognises that meeting these specifications will require some product development and therefore may take longer; and
- ensure that lunches meet the standards for fruit and vegetables (not less than two portions per day); oily fish (at least once every three weeks); deep fried products (no more than two per week); bread (unrestricted throughout lunch); and water (freely available).

- 3.23 The Panel supported the idea of a limited number of 'pathfinder' projects in both primary and secondary schools. These projects would take account of already established good practice in healthy eating in schools, and would seek to develop menus which met the standards and were enjoyed by children, and included approaches to marketing the new meals to pupils and to their parents and carers.
- 3.24 The Panel also agreed that it would be useful for the School Food Trust to set out examples of both early experience and best practice in transforming school food, focusing particularly in areas of deprivation. This should link in with the DfES development of a reference group of local authorities, one of whose functions will be the dissemination of good practice.

The Panel recommends that:

- 3.25 The introduction of the new standards should be phased in over a period of time to allow the necessary preparation. Implementation will be more difficult in some schools (e.g. where there is a cash-cafeteria food service). The new standards should be fully achieved as soon as possible, and at the latest, for all primary schools by September 2008 and for all secondary schools by September 2009. (Recommendation 17)**
- 3.26 Schools and local authorities should aim for complete take-up of free school meal entitlement; and schools should aim to have at least 10% increase in school meals take-up by the end of the implementation period. (Recommendation 18)**

Guidance on an integrated approach to delivering change

- 3.27 If there is to be a transformation in school meals there needs to be a co-ordinated approach between schools, local authorities and caterers.
- 3.28 The challenge is massive. There are over 20,000 schools in England and all are going to have to meet the proposed mandatory standards by 2009 at the latest. Some tasks, like removing confectionery and pre-packaged savoury snacks from school dining rooms, will be straightforward, and this is why the Panel have recommended that this be done by September 2006. Other steps, like implementing the necessary training for catering staff, or developing marketing initiatives to promote meal uptake will be more complicated. There will be key milestones in the process of moving towards these standards and these will include:
- Developing strategies at local authority and school level which set out timed plans for activity in order to meet the

standards;

- Setting up school consultative and development groups including parents, pupils, teachers, caterers and governors to agree policies and timescales;
- Auditing dining room and kitchen provision to plan for facilities which are fit for purpose;
- Removing all confectionery, pre-packaged savoury snacks and fizzy drinks (except water) from school dining rooms by September 2006;
- Securing menu-planning software for menu development to meet nutrient standards and for self-monitoring;
- Auditing school caterer skills and implementing training to meet needs;
- Putting in place reporting mechanisms for monitoring standards

3.29 People will pass these milestones at different rates across the country. Schools where children are used to eating healthy, balanced meals and where confectionery is not a usual part of the offer will be able to move quickly to meet both nutrient and food-based standards. However, in schools where chips are now the mainstay of lunchtime services, progress might be slower. The Panel acknowledges that the speed at which the SMRP standards can be met will vary from school to school, but the first vital step will be to agree a plan to deliver within the timeframe.

4 Financial Investment

Funding arrangements for school meals in England

- 4.1 In 1967, financial responsibility for the provision of school meals passed from central Government to local authorities. For the last 40 years, the Government has not subsidised the cost of school meals in England.
- 4.2 There is, therefore, no specific funding for school meals contained within the recurrent funding allocated to local authorities or schools by DfES. Expenditure on schools in 2004-05 by central and local government was £32.51 billion or the equivalent of £3,800 (£3,990 in 2005-06) for each primary and secondary school pupil.
- 4.3 The cost of school meals is currently met through a combination of expenditure by local authorities, schools, and parents and carers. The costs of free school meals are met by schools (all secondaries; some primaries and specials) or local authorities (remaining primaries and specials). The recurrent funding that local authorities receive from Government reflects levels of deprivation; and an individual school's share of the local authority schools budget typically takes free school meals numbers into account.
- 4.4 Perhaps as a consequence of this model of funding, there is very little centrally collated information available, even at the most basic level, on how much is spent by local authorities and parents or carers on school meals; or the extent to which schools provide subsidised catering for their pupils. The Panel believes that this is highly unsatisfactory.
- 4.5 The Panel fully recognises that the standards being recommended imply a need for greater financial resources to go in to school meals. Good food costs more, so meal costs will need to increase to improve the quality of meals. The Panel hopes that those involved in school meal provision at all levels both will prioritise funding for school meals in order to achieve the step change which is required.
- 4.6 The Panel also considers that school meal services should aim to provide pupils with quality and value for money, with less emphasis on commercial profit making. Where schools are 'in profit' as a consequence of efficiently-run meals provision, the Panel believes that it would be beneficial for profits to be reinvested in order further to improve quality and service.

The Panel recommends that:

- 4.7 Schools and local authorities must improve transparency and accountability in relation to how much they spend on school meals, including food cost per meal; uptake; free school meal numbers; nature of service; level of any subsidy; and any surplus generated by the service and how it is spent. This information should be presented in the whole-school food policy⁴⁵ (Recommendation 22)**

Expenditure on school meals

- 4.8 The Panel referred to a number of research studies in order to estimate the current level of expenditure on school meals against which to benchmark the cost of implementing its recommendations.
- 4.9 In 2004, the Local Authority Catering Association (LACA) estimated that the total expenditure by parents or carers and LEAs was nearly £1 billion, made up as follows:

Food	£ 360m
Labour	£ 490m
Equipment	£ 33m
Training	£ 15m
Cleaning	£ 10m
Sundries*	£ 92m
TOTAL	£1000m

*Includes administration costs, uniforms, meal subsidies, rebates, surpluses

- 4.10 The LACA survey suggests that there are 7,600,000 primary and secondary school pupils in England, of whom 3,192,000 (43%) take a school meal; and that school caterers serve 612 million meals a year. This suggests that the average cost of a school meal is £1.63.
- 4.11 The current cost of providing free school meals (FSM) to those entitled is estimated at £241 million.
- 4.12 In 1979, the Public Expenditure White Paper estimated the cost of providing school meals as £360 million which, if translated using the Treasury's RPI model into a current equivalent, would equate to £1.25

⁴⁵ These should in turn be referenced from the school profile and school prospectus

billion. This 1979 figure is the only available benchmark. This suggests that, in real terms, expenditure on school meals by parents or carers and local authorities has fallen by 25% since 1979. The uptake of school meals has also fallen - from 61.7% in 1977 to 43% in 2004.

- 4.13 LACA estimates that as a consequence, allied to cost saving initiatives, £154 million per year has been lost to the school meals service since the introduction of CCT.

International comparisons

- 4.14 The Panel also looked at how our spending on school meals (estimated average cost of £1.63) compared with other countries, particularly in Europe. For example, a school meal in a primary school in Spain costs €2.95 (£1.98) and a secondary school meal costs €3.32 (£2.22). In France the cost of a meal ranges from €3.50-€4.50 (£2.34-£3.00).

- 4.15 The Panel also benchmarked its estimated costs against the Scottish Executive's 'Hungry for Success' (HfS) programme⁴¹ and Appendix 7.1. The initial three years' costs of HfS are estimated to have been £51 million (excluding the cost of increased meal uptake, renovation and refurbishment). Total investment was £63.5m. PriceWaterhouseCoopers (PwC) estimated that, if this cost was adjusted to mirror the context in England, it would equate to an average annual cost over three years of £176m, broadly in line with their estimate for England of £167m in the first year and recurring costs of £158.8m over the subsequent two years (see Section 4.4). In September 2005, the Scottish Executive announced an extension to its subsidy of schools meals through a further £70m for 'Hungry for Success' for the next three years.

Investing in school meals – revenue costs

- 4.16 As part of its remit to bear in mind the cost issues associated with our recommendations, the Panel undertook some financial analysis. The costs in the following two sections represent the best estimate we can make, using the currently available information and in the time available to us. It should be noted, however, that uncertainty remains over the exact scale of overall costs, especially in relation to the cost of renovating and refurbishing kitchen and dining facilities; and, of course, local circumstances may vary considerably.
- 4.17 The Panel commissioned PricewaterhouseCoopers (PwC) to assist us in costing our recommendations⁴⁶ (Appendix 5). Given the lack of centrally collected information on school meals provision and expenditure, PwC surveyed 20 LACA members responsible for the

⁴⁶ Price Waterhouse Coopers (2005) Economic costs of implementing Caroline Walker Trust guidelines. Department for Education and Skills, London.

provision of school meals either in their own authority or as a private contractor providing meals across many authorities. Thirteen responses were received, representing 23.9% of primary schools and 10.1% of secondary schools in England. In addition, to help establish baseline figures, PwC carried out desk-based research to assess whether there was any recent, relevant, publicly-available information relating to the adoption of nutritional standards.

4.18 The table below shows the estimated annual variable costs of implementing the new standards, including ingredient costs, labour, training, marketing and waste. These costs are higher in year one to reflect additional expenditure on staff training. The figures assume no increase in uptake of school meals and no efficiency savings.

Variable Costs ⁴⁷	Initial		Recurrent	
	Estimate 1	Estimate 2	Estimate 1	Estimate 2
Primary total based on these estimates	£79.0m	£95.4m	£76.6m	£93.0m
Secondary total based on these estimates	£91.5m	£68.5m	£84.7m	£63.3m
Total	£170.5m	£163.9m	£161.3m	£156.3m
Mean estimate	£167.2m		£158.8m	

4.19 The Panel also considered the impact of its recommendations for ingredient costs. We estimate that the cost of ingredients accounts for roughly two-thirds of the additional cost of implementing our proposals.

4.20 CWT suggested in their recent 'Eating Well at School' document that per meal ingredient expenditure of 70p (primary schools) and 80p (secondary schools) would be likely to be needed to meet CWT standards. PwC, in its work for the Panel, found that current average levels of expenditure already almost meet the Government's suggested minima (March 2005) of 50p (primary) and 60p (secondary); and are on the way towards their own estimated levels of 66.8p (primary) and 77.8p (secondary).

4.21 These increasing levels of expenditure bear out the findings of the British Market Research Bureau⁴⁸, which found that 75% of parents or carers would be prepared to pay more for school lunches if they included more fresh food. There is also a growing priority attached to school meals at a local level. However, Sodexho's School Meals and Lifestyle Survey⁴⁹ suggested that while 94% of parents or carers

⁴⁷ Estimate 1 relates to indicative information provided by the Local Authority Catering Association on the cost of ingredients required for CWT compliant menus. Estimate 2 relates to the information gathered as part of the survey of LACA members on estimated extra ingredient costs following the implementation of CWT guidelines.

⁴⁸ British Market Research Bureau, March 24th 2005. Press Release – Jamie's School Dinners

⁴⁹ Sodexho (2005): School Meals and lifestyle survey.

believe it is important/very important that their child's school provides a healthy meal at lunchtime, significantly fewer (14%) are actually willing to pay more.

4.22 Interestingly, Sodexo's survey also reveals that children aged 8-16 spend on average £1.01 on the way to school, and 74p on the way home from school, on chocolate, crisps, confectionery and canned drinks. This totals £549m for 2005, an increase of 213% since 1998, when £257m was spent in this way.

Investing in school meals – capital costs

4.23 During its review, the Panel heard from caterers and schools about the poor condition of kitchens and dining facilities in many of England's schools. The Panel concluded that significant investment is likely to be required to upgrade facilities to a 'fit for purpose' standard to enable schools to meet the new nutritional standards through the on-site preparation of meals using fresh ingredients wherever possible.

4.24 PwC estimate that the average cost of upgrading kitchens would be £13,000 in primary schools and £23,000 in secondary schools and that dining room refurbishment would cost £6,000 in primary schools and £12,000 in secondary schools. These figures are well within the amounts of capital money that all schools receive directly each year for investment. There are also schools where complete new build of the kitchen facilities will be needed at much higher costs.

4.25 Based on these estimates, and assuming that 70% of schools need some refurbishment, the cost of upgrading England's primary and secondary schools to the required standard would be around £289 million.

4.26 We have already highlighted the uncertainty surrounding these estimates and the Panel recommends that further research work is carried out to establish their relevance to individual local circumstances.

4.27 Taken altogether, this funding totals over £1.1 billion in 2005-06. In addition to this, schools should also be encouraged to prioritise kitchen and dining facility needs in their direct capital funding (in 2005-06 this is over £800 million in total, with a typical primary school getting £25,000 and a typical secondary school, £87,000). The Panel also notes that the Building Schools for the Future (BSF) programme includes provisions for ensuring that kitchen and dining facilities in all secondary schools are fit for purpose as they are included in the programme. The BSF budget for 2005/6 is £2.2 billion. There is no BSF programme for primary schools and the Panel noted this as a concern.

- 4.28 In spring 2005, the Chancellor announced £150m of capital investment for primary schools for 2008-09 rising to £500m from 2009-10. The Panel suggests that kitchens and dining areas should be given priority within that investment.
- 4.29 It should be noted that these estimates do not include the cost of reinstating kitchens in schools in those local authorities who now operate a cold packed-lunch service only.

The Panel recommends that:

- 4.30 There should be no further degradation of service or provision by individual schools or local authorities from the current position, and kitchens should be a priority under 'Building Schools for the Future'. The DfES should undertake further work to consider the options for schools which no longer have their own kitchens. Schools and local authorities should be encouraged to reach the highest standards of provision and kitchens should be a priority in all schools' capital investment programmes. (Recommendation 23)**
- 4.31 DfES has asked all local authorities to revise their asset management plan data by the end of this year. This information should show-up deficiencies in kitchen and dining areas but will not, due to timing, reflect the standards and approach recommended in this report. We recommend that DfES should (i) consider what further work needs to be done to supplement the information gathered from current activity; (ii) use this information to ensure that kitchen and dining areas are a priority in capital spending programmes; and (iii) ensure that all future asset planning takes the new SMRP standards and approach fully into account. (Recommendation 28)**
- 4.32 Guidance on formulaic funding delivered to local authorities and schools, should prioritise the renovation and refurbishment of kitchens and dining facilities. (Recommendation 24)**
- 4.33 The Government needs to ensure that current Private Finance Initiative (PFI) contracts and 'Building Schools for the Future' (BSF) initiatives do not impose barriers to the improvement of school food and also ensure that in future all school PFIs incorporate building specifications which enable the main meal to be cooked on the premises and practical cooking skills to be taught to all pupils. The Government should require all partners in PFI deals to be bound by the new standards. The existence of long-term contracts cannot be allowed to adversely affect the health of pupils in PFI schools. (Recommendation 25)**
- 4.34 The Panel suggests that kitchens and dining areas should be given priority within primary capital investment. (Recommendation 26)**

Investing in our children's future

- 4.35 As shown in the table in paragraph 4.18, PwC's report suggests that the additional cost to local authorities, schools and parents and carers of implementing SMRP standards - based on a 3-year transition; at current levels of uptake; and assuming no efficiency savings - is in the order of £167m in the first year and £159m in subsequent years. Although there is uncertainty about these figures, they do provide a very useful estimate of the additional money that needs to be levered into the system.
- 4.36 In March 2005, DfES committed £220m, over 3 years (2005-06 to 2007-08), through the Standards Fund, for local authorities (£30/50/50m) and schools (£30/30/30m). This transitional money, the first tranches of which will be paid in September and October 2005, is designed to place school meals on a sustainable footing at a level of quality which at least meets the nutritional standards recommended in this report. We understand this funding is, in part, intended to stimulate local review of the school meals service and planning for improvement. The Government anticipates that this process will deliver some efficiency savings in local school meals provision.
- 4.37 Clearly the extra cost depends on when the standards are delivered. We have recommended elsewhere in this report that primary schools be allowed 2 years and secondary schools 3 years from September 2006 to meet the standards. We are concerned that any shorter period of delivery will not give some schools and caterers enough time to prepare and may result in price increases that have an adverse impact on uptake. A longer period, such as the 5 year implementation period recommended by PWC, would however risk loss of momentum for change.

Free school meals

- 4.38 PwC's work points out the sensitivity of consumers to steep price increases and the potential for a decrease in uptake which could, the Panel suggests, call into question the viability of school meals services in some areas. Low income families whose children sit just above FSM eligibility must be a particular consideration. These children are the most likely to be driven out of the system by a price increase and are, research shows, among the most nutritionally vulnerable.
- 4.39 However, only four children in five who are entitled to a free school meal, actually take it (paragraph 1.32). It is the responsibility of schools to take the lead in addressing this issue.
- 4.40 As part of the Panel's work, further analyses were conducted to assess whether children living in families in receipt of Working Tax Credit would nutritionally benefit from FSMs. This secondary analysis of

national survey data (Figure A3.2.9 within Appendix 3.2) concludes that there is a strong argument to do so.

The Panel recommends that:

4.41 The Secretary of State should take note of our concerns that low income families may be adversely affected by price increases, and investigate options for mitigating possible nutritional and economic risks. (Recommendation 21)

Conclusion

4.42 The Panel believes that the cost of our proposals represents a need for significant investment from both public and private sources. But we consider that this investment, when compared to the benefits that will accrue to the health and wellbeing of future generations through a transformed school meals service, is a price worth paying.

The Panel recommends:

4.43 In line with the Government's expectation that the transformation of school meals should be led by local authorities, we recommend that local level discussions recognise the desirability of phased – as opposed to sudden - price increases. (Recommendation 29)

4.44 The Government should make school meals a priority during the Comprehensive Spending Review 2007. (Recommendation 30)

4.45 The economic costs of the changes should be modelled against the economic benefits. For example the benefits include: sourcing more food from local suppliers will benefit local economies and cut down transport and infrastructure costs; using more fresh ingredients will require longer kitchen assistant hours and this will benefit catering staff; the possible link between better nutrition, educational attainment and associated life-time earnings gain. (Recommendation 27)

5 Monitoring and Evaluating Change

Assessing Change

- 5.1 Based on the evidence taken from the case studies within this report (Appendix 7) the Panel believes that implementation of the standards recommended within this report will revolutionise school meal provision and subsequently (with support across the whole school) improve lunchtime nutrition amongst pupils using school meals services. It will be vital to track these changes against the milestones for phased change indicated in Section 3 (Delivering Change). This will provide the framework to help caterers and health promoters strive to meet these standards and evaluate the impact of the standards nationally.
- 5.2 This section outlines the main types of monitoring and evaluation envisaged, and makes a number of key recommendations to shape these processes. In formulating these recommendations the Panel defined:
- Monitoring as the process by which people check whether schools are on course to meet the standards. This encompasses:
 - self monitoring, where caterers, school leaders, and governing bodies do their own monitoring
 - external monitoring, where external agencies (eg. Ofsted) check to what extent schools have met the standards
 - Evaluation as the process whereby information and data is collected locally and nationally to assess the overall effect of the standards

Self Monitoring

- 5.3 Catering providers will be required to produce evidence that the combinations of foods they serve meet the standards. There are a variety of methods for doing this.

Self Monitoring: Menu software

- 5.4 The most accurate way for caterers to check whether they are meeting the standards is to use menu planning software. There are a number of such packages currently available and to fit this purpose they should:
- hold a recognised database of compositional data (e.g. the latest version of McCance and Widdowson's data base);

- allow analysis of the non-milk extrinsic sugars (NMES) content of foods, recipes and menus;
 - calculate fibre content based on non starch polysaccharide values (i.e. Englyst method of analysis);
 - be able to analyse recipes and menus appropriately;
 - compare nutritional values obtained against the SMRP standards.
- 5.5 School caterers in England will be free to select and use menu planning software which suits their needs. The output from this software tool (usually a bar chart or table showing how menu provision compares against individual nutrient standards) is one element of the hard evidence caterers can produce to show they are meeting standards.
- 5.6 Schools which do not wish to purchase such software, or where it is inappropriate, will be able to obtain sample 'standard assured' menus (with accompanying recipes) from a menu library proposed to be held by the School Food Trust. In addition Dietitians and Registered Nutritionists are also able to offer a menu analysis service to support caterers with this type of self monitoring.

The Panel recommends that:

- 5.7 The School Food Trust should hold a database of standards compliant menus for schools to use at their discretion; and standard analysis services which would support schools in providing and analysing their own meals service. (Recommendation 35)**

Self Monitoring: Checklists

- 5.8 To attain the nutrient standards set out in this report, caterers will need to concentrate on planning menus which incorporate a high proportion of nutrient-dense foods. There will be no place for foods which provide little other than calories. The food based standards *and* accompanying guidance within this report are all designed to make it easier for caterers to meet the nutrient standards for provision. If caterers are meeting all the food-based standards and following the guidance in Appendix 4, it is very likely they will be meeting the nutrient standards for provision.
- 5.9 It will be relatively easy to construct a checklist which tests whether the core 9 food-based standards are being met and whether caterers are undertaking the main actions which will help to achieve the nutrient

standards. However, the Panel recognises that further work should be conducted to test the utility and validity of such a checklist, and to develop a national tool which can provide a pragmatic and effective framework for catering change.

The Panel recommends that:

5.10 A checklist should be developed, as part of the package of further tools and guidance. It should be piloted to ensure it is effective in bringing about change and supporting implementation of the nutrient and food standards. (Recommendation 33)

External Monitoring: OFSTED Inspections

5.11 From September 2005 a new Ofsted inspection framework will rely predominantly on school self evaluation. In support of the drive to improve the health and well-being of pupils, Ofsted will expect schools to evaluate their provision and to present evidence about their general approach to healthy eating and food, including the standard of school lunches. Ofsted will comment on this evaluation in its report under the section on the health and well-being of the pupils.

5.12 In addition, Ofsted will undertake a separate and specifically-focused programme of visits, accompanied by nutritionists, to a smaller sample of schools. This will allow more detailed reporting on the standard of food provided and consumed in schools.

5.13 The Panel agreed that Ofsted inspections provide the appropriate infrastructure for external monitoring and evaluation of these standards. Every Child Matters provides the policy context for this recommendation, and health and well-being will be one of the 5 key themes for Ofsted inspections.

5.14 However, during its discussions the Panel recognised that:

- For each local authority, sufficient numbers of schools will need to be sampled over time to provide representative insights into progress towards achieving the standards
- Ofsted inspectors will need to be supported by appropriate specialist input (eg training from Dietitians or Registered Nutritionists);

5.15 For the separate and specifically-focussed programme of visits to a smaller sample of schools, further development work is needed to identify the school food related data which should be collected, and to test the utility and validity of tools to record this information. Inspectors could collect qualitative and quantitative data, covering a wide range of

aspects. These could include: processes for school lunch provision; types of foods and drinks available within schools; successes and difficulties of working towards the standards; evidence from menu planning software; estimates of uptake and wastage; evidence of healthy eating policy development within the school; and curriculum contributions. It will be important to develop an inspection tool which is accurate, effective, reliable and feasible within the time of an inspection visit. This tool would need to link the findings within schools with the objectives of the standards, and indicate the areas of improvement that would be needed in order to help schools achieve the standards fully.

The Panel recommends that:

5.16 The main approach to external monitoring and evaluation should be through the regular inspections carried out by Ofsted. This should be supported by evidence gathered from the in-depth inspections of a sample of schools carried out by HM Inspectors, supported by nutritionists. The Panel recommends further work should be conducted by Ofsted and DfES to use the pilot inspections planned for November 2005 to develop the methodology and a rigorous set of tools to support those inspections. (Recommendation 32)

External Monitoring: Local Authorities

The Panel recommends that:

5.17 Local authorities should be required to collect and report annually on progress in achieving healthy school standards, provision and uptake of all (including free) school lunches, and steps being taken to work towards the achievement of school lunch standards e.g. use of nutrition software, checklists, smartcards, incorporation of standards in contracts. The DfES should collect and collate this data to provide a national overview of progress. (Recommendation 34)

External Monitoring: Smart Cards

5.18 Increasingly, pre-paid payment smartcards are being used to monitor pupils' lunchtime choices. These contain a circuit chip and as well as providing a cashless payment system can also be used to record food

choices and reward healthier selections. (See Hungry for Success case study in Appendix 7.1). Initial trials suggest that they are efficient in reducing queuing and as a result increase school meal uptake^{50 51}. Many accept that they also enhance the anonymity of free school meal pupils within the school dining room. Smartcards also mean that children have to use their parents' money to buy school food, rather than spending it on other items – which benefits both the school and parents or carers. On the basis of this evidence the Panel supported this type of cashless payment system, particularly within secondary schools where smartcards can be used to market healthier choices to pupils. The Panel further recognised that to be really useful as a monitoring tool, systems should be compatible across schools and local authorities.

External Monitoring: Reporting to Stakeholders

- 5.19 A number of stakeholders (parents or carers, pupils, governors, teachers and head teachers, primary care trusts, local authorities) will be interested in knowing more about a school's performance in meeting healthy school food standards. Evidence from the self monitoring procedures will be an important basis for this dialogue. This evidence may include charts which indicate that planned menus fit nutrient standards or results from checklists, demonstrating that caterers are meeting food-based standards and following healthier practice in the kitchen.
- 5.20 The School Profile should state whether the school has a whole-school food policy. Headteachers may also choose to communicate this information directly (e.g. through letters, emails, school newsletters) to key stakeholders in order to influence further change. The Panel recognised the importance of this dialogue and the need to use existing channels through which this reporting can happen.

National Evaluation of Standards

- 5.21 In addition to internal and external monitoring, it will be important to assess the overall effect of the introduction of these standards. They have the potential to impact on a range of issues including:
- Food and drinks provision in schools;
 - Catering practice;
 - Eating patterns and the nutritional intake of pupils taking school lunches;
 - Numbers of children taking school lunches;

⁵⁰ Lambert et al (2005a)

⁵¹ Lambert et al (2005b)

- The involvement of pupils in changes to catering, and the degree to which they have accepted these
- Educational performance and the classroom behaviour of pupils in schools;
- Catering costs and revenue.

5.22 Some baseline data is in place for some of these. In particular, the school meals surveys conducted in 2004⁵² and 2005⁵³ provide insight into catering provision and lunchtime pupil intake (of both foods and nutrients). However, there will be gaps in the amount of data available and it will be important for the DfES to draw up an evaluation plan which sets out what information should be collected, by whom and when, in order to obtain the best evaluative picture possible.

The Panel recommends that:

5.23 At appropriate intervals (eg. of 4 years) a nationwide evaluation of school food provision should be commissioned by DfES, to assess the types of foods and drinks available, their uptake and nutrient contribution to the overall diet. The evaluation should pay particular attention to provision for children who are nutritionally at risk. This evaluation should be timed for completion before the review of the standards in 2011. (Recommendation 31)

⁵² Nelson et al (2004) School Meals in Secondary Schools in England. London: DfES

⁵³ Nelson et al (2005) School Meals in Primary Schools in England (In press)

6 Conclusion

- 6.1 There is both a public and a private responsibility to ensure that children are adequately fed. It is also in our collective self interest. Poor dietary health costs money. Increasing levels of childhood obesity, plus the glaring mismatch between what children need for healthy development and what on average they actually eat, is fuelling NHS costs. The state of many school meals is an indictment of more than two decades of public policy which has in effect stripped nutrients off plates, removed skills from kitchen staff and seen the take-up of school meals drop precipitously. But the examples of local improvement studied by the Panel demonstrate that all this can be reversed. Not since the creation of the welfare state has there been such a groundswell of public support for improvement of school meals.
- 6.2 The standards we recommend will be a solid foundation for the transformation of school food. Their delivery will be complex, will require sustained effort and will even, in some places, require a wholly new start. But school meals are an essential public service, no less important today than when they were introduced at the beginning of the last century. These new standards are a robust way of ensuring adequate nutrient intake. When applied, they will have very considerable physical, educational and social benefits. For many children they will be a nutritional safety net. For all these reasons, the Panel recommends them confidently for implementation.