

REGULATORY IMPACT ASSESSMENT (RIA)

1. Title of proposal:

1.1. Target Nutrient Specifications for Manufactured Products Used in School Meals

2. Purpose and intended effect

Objectives

- To improve the nutritional profile of manufactured products used in school meals throughout the UK to support work under way to review nutritional standards for school meals¹, and to contribute to wider activity by the Agency to reduce intakes of salt and saturated fat, and to improve calorie balance.
- To improve the diets and health of UK schoolchildren by making it easier for them to choose healthier options at school, thereby helping to reduce the prevalence of diet-related diseases in later life (such as diabetes and coronary heart disease).

Background and Rationale for Government Intervention:

2.1. The Food Standards Agency's Strategic Plan 2005-2010 'Putting Consumers First'² states the key aim under 'Eating for Health' is to make it easier for all consumers to choose a healthy diet, and thereby improve quality of life by reducing diet-related disease. Targets for changing people's diet include:

- Working with health departments and other stakeholders to reduce the average salt intake of UK adults from the current 9.5 grams to 6 grams per day by 2010, and to reduce salt intake of children in line with Scientific Advisory Committee on Nutrition age-specific recommendations, also by 2010
- Working with health departments and other stakeholders to reduce the average intake of saturated fat (for everyone from age 5 upwards) from the current level of 13.4% to below 11% of food energy by 2010)

2.2. In addition, in England, the White Paper 'Choosing Health: Making Healthy Choices Easier'³, published in November 2004, sets out a range of current health challenges to be addressed. It explains that while we have seen improvements in health there remain important challenges, many of which, such as levels of obesity, heart disease and some cancers, are affected by diet. In Wales, *Food and Well Being*, a joint FSA Wales/National Assembly for Wales strategy

¹ DfES has responsibility for setting statutory nutritional standards for school meals. DfES, DH and the FSA are jointly working on improving school food and the FSA is taking forward a range of activities (including proposals for target nutrient specifications) that contribute towards this.

² Food Standards Agency. Strategic Plan 2005 – 2010 – Putting Consumers First. 2005

³ Department of Health. Choosing Health: Making Healthy Choices Easier. TSO, 2004.

Department of Health. Choosing a Better Diet: a food and health action plan. 2005

This work complements that being taken forward as part of the Scottish Action Plan *Eating for Health, Meeting the Challenge*, the Welsh strategy "*Food and Wellbeing*" and the proposed *Food and Nutrition Strategy for Northern Ireland*.

launched in February 2003 aims to improve the diet of the population, especially in relation to children and young people.

- 2.3.** A key aim of the Agency's work on diet and nutrition in relation to children is to reduce population-wide average intakes of saturated fat to recommended levels set by the Committee on Medical Aspects of Food and Nutrition Policy (COMA)⁴, and to reduce salt intakes to age-specific levels recommended by the Scientific Advisory Committee on Nutrition (SACN)⁵. Current UK recommendations are that the population average intake of saturated fat should not exceed 11% of food energy intake. The current UK recommendations for daily target average salt intakes are: 6 grams/day for children aged 11 years and over and for adults (5 grams/day for women and 7 grams/day for men), and for children aged 0-6 months: <1 gram/day, 7-12 months: 1 gram/day, 1-3 years: 2 grams/day, 4-6 years: 3 grams/day and 7-10 years: 5 grams/day. The Agency is also committed to encouraging improved balance between calorie input and energy output.
- 2.4.** Results from the National Diet and Nutrition Survey of Young People Aged 4 to 18 Years, published in 2000⁶, showed that the majority of children and young people were adequately nourished in many respects. However, there were some areas of concern, notably that young people, like adults, were consuming too much saturated fat, sugar and salt and less fruit and vegetables than is recommended.
- 2.5.** The Government intends to revise the current statutory nutritional standards for school lunches in England and to consider introducing nutrient-based standards to improve nutrition in school meals.
- 2.6.** To support this process, a programme of work to set target nutrient specifications for manufactured foods used in school meals was announced in February 2005. The Food Standards Agency is developing these new target specifications, which will contribute to wider activity looking to reduce, salt, fat and sugar content of foods across the UK.
- 2.7.** This work will also support the recommendations in the 'Health Challenge Wales – Action on Food and Fitness for Children and Young People' which was issued for consultation in July 2005. The report of a Food in Schools working group, looking at provision of food throughout the school day and including recommendations on lunches and other issues will be published for consultation shortly.
- 2.8.** This RIA sets out our initial assessment of the potential impact on business, charities, the voluntary sector and on health, of taking action to set target nutrient specifications for manufactured foods used in school meals across the United Kingdom.

⁴ Department of Health. Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. London: HMSO, 1991. (Report on Health and Social Subjects, No. 41)

⁵ Scientific Advisory Committee on Nutrition. Salt and Health. London: TSO, 2003

⁶ Gregory J, Lowe S, Bates CJ, Prentice A, Jackson LV, Smithers G, Wenlock R & Farron M. National Diet and Nutrition Survey: young people aged 4 to 18 years. Volume 1: Report of the diet and nutrition survey. London: TSO, 2000.

Risk Assessment

2.9. The risk assessment below outlines what we know about the actual levels of salt, fat and sugar consumption by children and the need for action to reduce these levels to improve health.

2.10. *Current average salt intake:* The National Diet and Nutrition Survey (NDNS) of adults⁷ showed that intakes of salt are above the COMA-recommended levels and increased between 1986-87 and 2000-01 from 10.1 to 11.0 grams/day for men and 7.7 to 8.1 grams/day for women, based on analysis of a 24 hour urine collection. Similar data for children are not available as the methodology used for the survey of young people did not include a 24 hour urine collection. Estimates of salt intake are derived from the dietary method used in this survey (a weighed record of food consumed over a seven day period). However, this method does not allow quantification of salt used during cooking or at the table, and so the salt intakes given in the table below⁸ for children are almost certainly underestimates of the actual amounts consumed.

Age (Years)	Male (Estimated Salt grams/day)	Female (Estimated Salt grams/day)
4-6	5.3	4.7
7-10	6.1	5.5
11-14	6.9	5.8
15-18	8.3	5.8

2.11. Around 75% of salt in the diet comes from processed foods⁹. The Agency has carried out an initial further analysis of data from the NDNS of young people. This showed that the major contributors to salt intakes in the diets of children (aged 7 to 10 years) were similar to those for adults and included white bread, breakfast cereals, savoury snacks, sausages, baked beans and bacon and ham.

2.12. *Current average non-milk extrinsic sugar (NMES) intake:* Results from the NDNS of young people aged 4 to 18 years show that average intakes of NMES was higher than the recommended level of 11% of food energy intake, at 16.7% for males and 16.4% for females.

⁷ Henderson L, Gregory J, & Swan G. National Diet and Nutrition Survey: adults aged 19 to 64 years. Volume 1: Types and quantities of foods consumed. London: TSO, 2002

Henderson L, Gregory J, Irving K & Swan G. National Diet and Nutrition Survey: adults aged 19 to 64 years. Volume 2: Energy, protein, carbohydrate, fat and alcohol intake. London: TSO, 2003

Henderson L, Irving K, Gregory J, Bates CJ, Prentice A, Perks J, Swan G & Farron M. National Diet and Nutrition Survey: adults aged 19 to 64 years. Volume 3: Vitamin and mineral intake and urinary analytes. London: TSO, 2003

Ruston D, Hoare J, Henderson L, Gregory J, Bates CJ, Prentice A, Birch M, Swan G & Farron M. National Diet and Nutrition Survey: adults aged 19-64 years. Volume 4: Nutritional Status (anthropometry and blood analytes), blood pressure and physical activity. London: TSO, 2004

Hoare J, Henderson L, Bates CJ, Prentice A, Birch M, Swan G, Farron M. National Diet and Nutrition Survey: adults aged 19-64 years. Volume 5: Summary report. London: TSO, 2004

⁸ Scientific Advisory Committee on Nutrition. Salt and Health. London: TSO, 2003

⁹ British Nutrition Foundation. Salt in the Diet Briefing paper, 1994

- 2.13.** The main source of NMES were drinks (particularly carbonated drinks which contributed 18% to total intake for males and 16% for females overall and increased significantly with age) and sugars, preserves and confectionery (particularly chocolate confectionery which contributed 12% to total intake for males and females).
- 2.14.** *Current average total fat and saturated fat intake:* Current UK recommendations are that the population average intake of total fat should not exceed 35% of food energy. Results from the NDNS of young people aged 4 to 18 years shows that the proportion of energy supplied by total fat was, on average, close to recommended levels for each age and sex group. However, intakes of saturated fatty acids, at around 14%, was higher than the 11% of food energy recommended by COMA.
- 2.15.** Major contributors to the average intake of saturated fat among young people aged 4 to 18 years were milk and milk products (23% of total intake for males and females), cereals and cereal products (22% of total intake for males and females, just under half of which came from biscuits, buns, cakes and pastries), and meat and meat products (19% of total intake for males, 16% for females). Chocolate confectionery contributed 9% of overall intake for males and females, and savoury snacks contributed 7% of total intake by males and 8% by females.
- 2.16.** *Current average protein intake:* Results from the NDNS of young people aged 4 to 18 years show that population average protein intakes were well in excess of recommended intakes (i.e. above the Reference Nutrient Intake (RNI¹⁰)) for each age and sex group. For example, mean protein intake for boys aged 4 to 6 years was 249% of the RNI. Although this percentage decreased with age, mean intake was still more than 120% of the RNI for both boys and girls aged 15 to 18 years. However, some target minimum protein specifications have been set for vegetarian options to help ensure an adequate protein intake for vegetarians from school lunches.
- 2.17.** *The health risks associated with high intakes of salt and saturated fat, and obesity:* Heart disease, stroke, joint problems and the commonest form of diabetes (type 2) for example, are direct effects of obesity and overweight. The National Audit Office estimated that in 1998 there were over 30,000 deaths attributable to obesity¹¹. The prevalence of obesity is rising for both adults and children, and more children are being found to have type 2 diabetes¹². Results from the Health Survey for England (2005)¹³ shows that, between 1995 and 2003, the prevalence of obesity among children aged 2 to 10 years rose from 9.9% to 13.7%. COMA consider that high levels of fat intake are implicated in the

¹⁰ The Reference Nutrient Intake (RNI) is the intake which is considered sufficient to meet the requirements of 97.5% of the population

¹¹ National Audit Office. Tackling Obesity in England. Report by the Comptroller and Auditor General. HC 220 Session 2000-2001: TSO, 2001.

¹² Report of a working party of the Royal College of Physicians, Royal College of Paediatrics and Child Health and the Faculty of Public Health Medicine. Storing Up Problems: The Medical Case for a Slimmer Nation. Royal College of Physicians, 2004

¹³ Office for National Statistics. Obesity Among Children Under 11, 2005 (at www.dh.gov.uk/PublicationsAndStatistics/PublishedSurvey/HealthSurveyForEngland/HealthSurveyResults/fs/en). The report uses the UK National Body Mass Index (BMI) percentile classification to describe childhood overweight and obesity among children aged 2-10. Explanation of this measure and details of how overweight and obesity are categorised are given in the technical annex of this report

development of obesity and other associated conditions, such as diabetes, heart disease and some cancers^{14,15}.

2.18. A high intake of saturated fat is associated with raised levels of blood cholesterol, a major risk factor for coronary heart disease. Increased blood pressure, or hypertension, is the most common outcome that has been associated with high levels of salt intake, and high blood pressure is a major risk factor in the development of cardiovascular disease. High blood pressure is a cause, or contributing factor, in 170,000 deaths each year in England alone¹⁶. People with high blood pressure are three times more likely to develop heart disease and stroke and twice as likely to die from these diseases than those with normal levels¹⁷. In Wales, circulatory diseases (mainly coronary heart disease and stroke) are the commonest form of death responsible for 40% of deaths in 2000 (over 13,400 deaths)¹⁸. There is extensive evidence that NMES is the most important dietary factor in the cause of dental caries. Although NMES is not directly related to the development of cardiovascular disease or diabetes, increased consumption could increase the intake of food energy¹⁹.

The Case for Action on Target Nutrient Specifications

2.19. The health risk assessment above presents the evidence that reducing intakes of fat, saturated fat, salt and sugar in children's diets benefits their health. How do we know that setting target nutrient specifications for manufactured foods used in school meals will help reduce their intakes and how does it compare with other factors that could reduce intake?

2.20. The Agency commissioned secondary analysis of the School Meals in England survey data in order to model the impact of applying the target nutrient specifications from Scotland's Hungry for Success²⁰ on the choices made by secondary school pupils in England. This analysis indicates that if caterers purchase and use manufactured foods meeting these target nutrient specifications, pupil intakes of total and saturated fat, salt and NMES from school meals would fall to close to, or below, recommended levels for a third of the day's intake.

2.21. Changing behaviours by exhortation alone is a slow process. With childhood obesity on the increase, a range of measures are needed to support education and awareness as part of a 'whole school' approach. Increasing access to, and availability of, a wider range of healthier foods is, thus, an urgent priority. We are aware that, increasingly, school caterers have had to rely on processed and prepared foods for provision of school meals. Choosing manufactured foods which meet target nutrient specifications for fat, saturated fat, salt and sugar

¹⁴ Department of Health. Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. London: HMSO, 1991. (Report on Health and Social Subjects, No. 41)

¹⁵ Department of Health. Nutritional Aspects of Cardiovascular Disease. London: HMSO, 1994. (Report on Health and Social Subjects, No. 46)

¹⁶ Scientific Advisory Committee on Nutrition. Salt and Health. London: TSO, 2003

¹⁷ Department of Health. The Annual Report of the Chief Medical Officer of the Department of Health, 2001

¹⁸ National Assembly for Wales. Health in Wales, Chief Medical Officer's Report 2001/2002

¹⁹ Department of Health. Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. London: HMSO, 1991. (Report on Health and Social Subjects, No. 41)

²⁰ Further details are available via the Scottish Executive website at www.scotland.gov.uk/library5/education/niss-05.asp.

therefore offers one effective way to achieve reductions in children's intakes. This is part of a wider review of school meal standards in England beginning in September, as set out in the White Paper 'Choosing Health: Making Healthier Choices Easier' - to reduce the amount of fat, salt and sugar in children's food and to increase fruit and vegetables and other essential nutrients.

2.22. In Scotland, voluntary target nutrient specifications for manufactured products have already been developed to support caterers achieve the nutrient standards for school lunches set within 'Hungry for Success'. In Wales, the Welsh Assembly Government is establishing a Food In Schools Working Group to advise on the extent to which more stringent nutritional standards are introduced, and in Northern Ireland consideration of the issues of school meal standards are under active discussion by the School Meals Steering Group.

3. Consultation

3.1. Draft target nutrient specifications for manufactured foods used in school meals were developed for 37 product categories. These took account of specifications that had already been produced by FSA Scotland in May 2004 to support implementation of the Scottish Executive's school meals policy 'Hungry for Success', and were further informed by information supplied by caterers, manufacturers and suppliers of school meals across the UK through an informal consultation in 2005 and by consultation with FSA Scotland, Northern Ireland and Wales.

3.2. A formal written public UK consultation was run in accordance with the Cabinet Office Code of Practice on Consultation on the establishment of voluntary TNS for 12 weeks from July to October 2005. Approximately 230 organisations were consulted, including representatives from food manufacturing, supply and catering, health professionals, local authorities, consumer and youth interest groups. The consultation was published on the FSA website. 56 responses were received, from across the full range of groups consulted.

3.3. Food industry representatives offered detailed comments on the development of the voluntary TNS. This included comments on the nutrient levels proposed and the ability of manufacturers to provide products that would meet them. Other groups called for tighter specifications (for example to reduce salt content), and there were also suggestions that the specifications should be made mandatory.

3.4. A summary of the consultation responses will be published on the FSA website, and copies of individual replies made available in the FSA library.

4. Options

4.1. We have identified three broad options:

4.1.1. Do nothing

4.1.2. Encourage voluntary adoption of the proposed UK target nutrient specifications for school meals by school caterers

4.1.3. Government to legislate to require the food industry to meet the UK target nutrient specifications for school meals

4.1.1: The ‘do nothing’ option

This would mean taking no action to support the concurrent work reviewing the nutritional standards for school meals. The nutrient profiles of manufactured foods used in school meals would be driven by other factors, such as cost. Consequently, without any proactive action by Government, it is likely that any change in composition would take longer and would not be consistent across the whole sector. Equally, any changes in children’s nutrient intakes would therefore be slower and inconsistent.

4.1.2: The “voluntary” option

This option is for caterers to be encouraged to adopt, on a voluntary basis, the proposed UK target specifications for manufactured foods that are used in school meals. The Government would encourage schools to procure manufactured products which meet the proposed target nutrient specifications.

Food manufacturers would be encouraged both directly and via the consequent market pull to reformulate products to meet specifications.

A voluntary approach would not be as far-reaching as full regulation and some players could choose not to co-operate, leading to inconsistency of benefit to children overall. However, if key players (such as large manufacturers and suppliers of manufactured foods used in school meals) take a lead this would provide a powerful example. The Food and Drink Federation, which represents many food manufacturers, has published a Food and Health Manifesto²¹ in which it states its members are committed to continuing to reduce levels of sugar, fat and salt in products generally. Option 2 would differ from the “carry on as we are” option in that new urgency would be injected and change driven as part of a wider and coherent strategy to review the nutritional standards for school meals. The voluntary approach would also be consistent with the FSA’s work to set salt targets.

4.1.3: The “legislation” option

Under this option, legislation would be introduced to ensure those product categories listed in Annex A, which are used in school meals throughout the UK, meet the target nutrient specifications set. Every child would then benefit from nutritional improvements in the manufactured foods which form part of their school lunch. If the UK wished to legislate nationally, it would need to be able to justify any measure that could affect intra-Community trade. Also, to the extent that the Community has already legislated to harmonise the composition of certain foods, it is not open to individual Member States to introduce different rules on the composition of those foods. The national measure would need to be notified in draft to the Community. The UK could press for action by the EU to legislate on the grounds of public health, which would require robust justification and the agreement of a qualified majority of member states and in the nature of such things could take several years to introduce.

²¹ Food and Drink Federation. Food and Health Manifesto. September 2004. Available at www.fdf.org.uk/manifesto.

5. Costs and benefits

5.1. Sectors and groups affected

- 5.1.1.** An improvement in school meals, supported by the development of target nutrient specifications for manufactured foods used therein, would clearly be of direct benefit to schoolchildren. In addition, this work would support the Government's National Healthy Schools Programme in England, and the Welsh Network of Healthy Schools Scheme in Wales contributing to the 'whole school' approach to health, which includes the provision of food.
- 5.1.2.** Other key sectors and groups, which would be affected, include the food industry (namely the manufacturers, suppliers and caterers involved in the provision of school meals) and those who procure school meals (e.g. some local authorities, and schools themselves).
- 5.1.3.** We do not consider that the setting of UK target nutrient specifications for manufactured foods used in school meals, or the options to drive this initiative forward, would have any disproportionate adverse impacts on, or disadvantage to, any particular racial or social group (as distinct from its impacts on industry). This initiative is intended to achieve action across a range of products and brands (at all prices) used in school meals, and therefore to improve the nutrient profile of manufactured foods used in school meals across the UK.
- 5.1.4.** School meals may be relatively more important in nutritional terms for disadvantaged children, and therefore they may benefit disproportionately from the proposed action.
- 5.1.5.** Further analysis of results from the Children's Dental Health Survey²² has shown that children attending schools classified as 'deprived' (determined by the proportion of children eligible for free school meals) were reported to have experienced more tooth decay than children in 'non deprived' schools. We know that consumption of NMES is the most important dietary factor in the cause of dental caries.
- 5.1.6.** We have also considered the impact of these measures on rural populations and consider that they will not have a different or disproportionate impact on people living in rural areas.

5.2. Costs

- 5.2.1. Costs for Option (1) - 'do nothing':** Under this option, no pressure would be applied by Government on industry to change the nutrient profile of manufactured foods used in school meals, and there would be no reformulation costs. This option is unlikely to achieve the desired improvements to the nutrient profiles of these products across the UK and ultimately help address the prevalence of diet-related diseases, e.g. in later life.

²² The 2003 Children's Dental Health Survey. Available at <http://www.statistics.gov.uk/children/dentalhealth/>

- 5.2.2.** There are direct costs to the NHS and indirect costs to the wider economy from diet related diseases. In England, for the population as a whole, the economic costs of obesity were estimated by the National Audit Office, using data from 1998, to be around £480 million in direct costs and £2.1 billion in indirect costs²³. In 2002 the House of Commons Health committee updated this estimate to £3.3 – 3.7bn for obesity and suggested that overweight may cost the economy a further £3.3 – 3.7bn, resulting in a total cost of £6.6 – 7.4bn per year.²⁴ Separately it has been estimated that the costs of coronary heart disease, including productivity losses, in the UK in 2003 were £7.9bn (the costs of obesity include only the portion of these costs estimated to arise from obesity)²⁵. Additionally, the direct health care costs alone of stroke are estimated to be £1.7bn in 1999 prices²⁶.
- 5.2.3.** These total costs can not be attributed entirely to school meals. However, improving the nutrient profile of school meals is one element in wider ranging work to reduce the prevalence of diet related diseases and even a small reduction would result in substantial economic benefits.
- 5.2.4.** Costs for Option (2) – ‘voluntary’ approach: Action by industry would be voluntary. However, target nutrient specifications are already in place in Scotland, supporting implementation of Scotland’s school meals policy “Hungry for Success”, and manufacturers are reformulating to meet these specifications. Industry has indicated that target specifications applying across the UK would assist in this ongoing reformulation work by providing a visible common reference point applicable to the sector across the whole of the UK.
- 5.2.5.** Consultation responses suggested that the cost of reformulating a product line ranged from £35,000 for a simple reformulation involving a single nutrient to £100,000 for more complex work. These estimates cover the full range of work involved, including research, pilot manufacture, consumer testing, packaging etc. Similar costs would be encountered in any reformulation work, whether associated with the introduction of TNS or not. The FSA considers that under this option these potential policy-related costs cannot be attributed to this policy option alone. Similar costs might be incurred under option 1 (‘do nothing’) as product formulation is routinely reviewed at intervals by manufacturers. A voluntary approach would maximise the opportunities for industry to integrate reformulation into its regular cycles of product review or co-ordinate work across all of a company’s product range.
- 5.2.6.** There is also increasing pressure from consumers for healthier products, and many food manufacturers have committed themselves to the Food and Drink Federation’s Food and Health Manifesto and “continuing to reduce levels of sugar, fat and salt in products and providing lower salt, lower sugar and lower fat options where technologically possible, safe and acceptable to consumers.”

²³ National Audit Office. Tackling Obesity in England. Report by the Comptroller and Auditor General. HC 220 Session 2000-2001: TSO, 2001.

²⁴ House of Commons Health Committee: Obesity; third report of session 2003-04; May 2004

²⁵ Petersen S, Peto V, Rayner M, Leal J, Luengo-Fernandez R and Gray A. European cardiovascular disease statistics. British Heart Foundation: London, 2005

²⁶ Liu JLY, Maniadakis, Gray A and Rayner M. The economic burden of coronary heart disease in the UK. Heart 2002; 88:597-603.

- 5.2.7. Administrative Costs:** There are some potential administrative costs resulting from this option. Manufacturers considering reformulation or caterers considering using voluntary TNS as part of their procurement process will need to become familiar with the TNS and how these relate to their products. Reference to the TNS should not involve more than reading and search time, at a negligible cost.
- 5.2.8.** There would also be some costs to the Government from monitoring changes in salt, sugar and fat content of food. However, monitoring and evaluation could be taken forward through existing Government surveys, such as the Agency's existing surveys of foods.
- 5.2.9. Costs for Option (3) – 'legislation':** Under a regulatory approach, all producers of manufactured foods used in school meals would have to meet the target nutrient specifications proposed. Those manufacturers that do not already meet the targets would therefore incur costs, primarily from product reformulation and the associated costs. Compliance would need to be enforced by a due date, and so the options to manage costs over time would be reduced.
- 5.2.10.** The total cost of this option would be significantly higher than option 2 because of the reduced flexibility in the timetable and because it would drive change across the whole industry who provide such products. This option may also remove potential product attributes that companies may use as a point of differentiation.
- 5.2.11.** This option would also impose costs on the Government and regulatory authorities for implementation and enforcement, namely local food authority enforcement officers and public analysts.

Unexpected costs and unintended consequences

- 5.2.12.** The cost arguments presented above are straightforward arguments about the costs to industry of reformulation. However, we recognise that there may be unintended impacts of taking this plan of action which will have associated costs. For example, schoolchildren could react negatively to changes in product formulation, with different products or manufacturers suffering varying impacts. This could involve children eating more packed lunches or an increase in consumption outside of the school.
- 5.2.13.** Even voluntary action could have unintended impacts on the dynamics of trade. Procurers of school meals who require that all manufactured foods they buy meet the target nutrient specifications may stimulate change in the wholesale sector. Suppliers may choose not to adopt the TNS, withdrawing from the school supply market and so reducing choice and price competition.

5.3. Benefits

- 5.3.1.** People's patterns of behaviour are often set early in life and influence their health throughout their lives. Infancy, childhood and young adulthood are

critical stages in the development of habits that will affect people's health in later years.

- 5.3.2.** Setting target nutrient specifications for manufactured foods used in school meals, as set out in Annex A, will play a key role in the provision of healthier school meals, and support a wider 'whole school' approach to promoting healthy choices and establishing healthy eating patterns at an early age.
- 5.3.3.** The Scientific Advisory Committee on Nutrition, in its report 'Salt and Health'²⁷, emphasised that it would be inadvisable for children in the UK to become accustomed to the levels of salt intake currently habitual for adults as the evidence suggests long-term consumption of such amounts being potentially harmful in adult life. The report went on to state that health benefits for children would be gained from a reduction in average salt consumption and daily target average salt intakes for infants and children were set (see section 2 above). The general population would also benefit from reduced salt levels in these manufactured foods used in school meals, as these products are also often available on the retail market for use in the home. A habitually higher intake of salt has been linked to a higher than average blood pressure, which may lead to an increased risk of heart disease or a stroke. A diet lower in salt would be expected to result in lower average blood pressure and a smaller rise in blood pressure with age. The cost to the UK of coronary heart disease is estimated at £7.9bn in 2003, including productivity losses²⁸. The direct health care costs alone of stroke are estimated to be £1.7bn in 1999 prices²⁹.
- 5.3.4.** Adopting the proposed UK target nutrient specifications for manufactured foods used in school meals could make a significant contribution to improving the nutrient content of school meals and the balance of children's diets overall by helping to reduce their intakes of total fat (particularly saturated fat), non-milk extrinsic sugars and salt. This would make a positive contribution to the current and future health of schoolchildren throughout the UK.
- 5.3.5.** This is demonstrated by a study modelling the impact of key Hungry for Success specifications on nutrient intake of pupils using the data from Secondary School meals in England. This resulted in a 16% reduction in energy intake (100 kcal), 27% reduction in fat, 23% reduction in saturates, 18% reduction in sodium and a 37% reduction in NMES intake. The new outcomes calculated were close to current recommendations for total and saturated fat intakes and below current recommendations for sodium and NMES intakes. The proposed target specifications in this consultation are, in some cases, more stringent and would, therefore, be expected to result in further improvements in nutrient intake balance for children and young people from school meals.
- 5.3.6.** Products used in school meals have gained significant publicity recently. Target nutrient specifications would provide industry with a clear benchmark for future review of their products, and, for planning reformulation work. As

²⁷ Scientific Advisory Committee on Nutrition. Salt and Health. London: TSO, 2003

²⁸ Petersen S, Peto V, Rayner M, Leal J, Luengo-Fernandez R and Gray A. European cardiovascular disease statistics. British Heart Foundation: London, 2005

²⁹ Liu JLY, Maniadakis, Gray A and Rayner M. The economic burden of coronary heart disease in the UK. Heart 2002; 88:597-603.

they would be applicable across the UK the target nutrient specifications also provide a transparent reference point to assist in negotiating and establishing contracts for school meal provision between local authorities, schools, caterers and product suppliers.

- 5.3.7.** The question, then, is the extent to which the three different options for driving the reformulation of manufactured foods used in school meals would bring about an improvement in the nutrient profile of school meals, and consequently produce the health benefits outlined above.
- 5.3.8. Benefits for Option (1) - 'do nothing':** If we “do nothing”, with comparatively little Government involvement (especially on fat and sugar), we are unlikely to see – in the absence of any other drivers – suitable product reformulation in the short-term. We would, therefore, be unlikely to see significant health benefits, compared to the other options. With salt, for example, there are (as described above) currently reduction programmes in place for different companies and products, because of existing Government action, and we know that some sectors of the industry have achieved salt reductions in some foods. However, salt levels in many processed foods at present, including those used in school meals, remain unacceptably high. Under this option, it is likely that average intakes of fat (particularly saturated fat), non-milk extrinsic sugars and salt would remain higher than recommended, because of limited product reformulation. This option would therefore have little impact on the dietary intake and health problems outlined earlier.
- 5.3.9. Benefits for Option (2) - 'voluntary':** Option 2 would encourage the food industry to reduce levels of total fat, saturated fat, non-milk extrinsic sugars and salt in manufactured foods used in school meals. There is a growing expectation from the public that big organisations should behave as socially responsible “corporate citizens” and a number of food companies and organisations have expressed a desire to be 'part of the solution' in the current food and health debate. The Food and Drink Federation recognises this in its Food and Health Manifesto, saying that its members “depend on deep relationships of trust with their consumers, which they have every interest in maintaining.”
- 5.3.10.** The effectiveness of a voluntary approach has been demonstrated by the reductions in saturated and total fat consumption achieved during the 1990s, in part through voluntary action by the industry to reduce fat levels in food.
- 5.3.11.** A successful outcome for Option 2 would be one that achieves suitable reformulation of the manufactured foods used in school meals produced by key manufacturers.
- 5.3.12.** Qualitatively, we expect that Option 2 (“voluntary” approach) should provide significantly more health benefits than Option 1 (“do nothing”), simply on the grounds that more products would be re-formulated, with a proportionately greater reduction in intakes of total fat, saturated fat, sugar and salt. The exact effect on intakes of these nutrients would depend on the extent of participation by manufacturers, suppliers and caterers of school meals. A number of companies involved in the provision of manufactured products used

in school meals have already expressed their intention to work positively with this initiative.

5.3.13. Benefits for Option (3) - 'legislation': Since a voluntary approach is unlikely to gain 100% participation, it is most likely that the legislative approach of Option 3 should bring about the maximum amount of product reformulation and the concurrent benefits to the overall diet and health of schoolchildren throughout the UK. This is supported by the secondary analysis of the School Meals in England survey data commissioned by the Agency (see para 5.3.5 above). The mandatory approach of Option 3 is likely to produce greater benefit than the lesser uptake through the voluntary approach of Option 2.

5.3.14. A general willingness by stakeholders to take part in action on school meals suggests that voluntary action would secure sufficient change to make a real difference to nutrient intakes. This RIA suggests that option 2, the voluntary approach, offers the best balance of cost and likely effect.

Social and Environmental Impacts

5.3.15. Other than the health impacts discussed in this document, the FSA believes that the introduction of voluntary TNS will not have an impact on social, equality or environmental issues.

6. Costs to Small Businesses

6.1. The Food Standards Agency has previously conducted an assessment of the impact on small businesses of a range of measures in its Action Plan on Food Promotions and Children's Diets³⁰. This assessment included potential costs to small manufacturers arising from product reformulation and re-labelling. The assessment concluded that potential additional costs to these small businesses would not be disproportionate in comparison to larger businesses.

6.2. On the costs of reformulation, it was concluded that manufacturing businesses of all sizes were likely to incur additional costs broadly in relation to their size, turnover and number of product ranges.

6.3. Contacts with small businesses confirmed this. These firms also noted the need to balance cost, quality and consumer preference in making a product that was acceptable to purchasers and consumers. It was suggested that smaller firms might find changes easier to accommodate as their very size might allow more flexibility to make changes in production processes. Although reformulation, whether voluntary or not, might lead some to consider moving out of supplying products for schools it could equally offer an opportunity to secure a competitive edge for those able to produce items to the specification required by their customers.

³⁰ The Regulatory Impact Assessment can be viewed at <http://www.food.gov.uk/multimedia/pdfs/fsa040705a4.pdf>

7. Competition assessment

7.1. Industry bodies have expressed concern to the Agency that individual manufacturers may face additional costs through losing out to competitors if they act unilaterally to reformulate products. The Agency would seek, through bilateral contacts with individual undertakings, to encourage widespread reformulation work. In addition, the Agency's food surveys suggest that there is considerable scope for reducing levels of salt, fat and sugar in processed products. These surveys suggest that the same types of products made by different manufacturers currently already vary widely in the amounts of salt, fat and sugar that they contain³¹. This is also true for the range of manufactured foods supplied for school meals.

7.2. For Option 1, to carry on as we are, there would be no effect on competition. For Option 2, to work with the food industry to lower levels of fat, salt and sugar in food, there may well be an effect on competition if some manufacturers consent to re-formulate their products but others do not. Manufacturers reformulating products will face some increase in costs, but those not reformulating may face reduced outlets should schools choose to take only products that meet the target specifications. Should Option 3 be chosen the wholesale sector supplying school meals could be affected. However, many companies may already supply a range of products, some of which meet, and some of which do not meet, the target specifications. Should companies wish to maintain the existing attributes of their non-compliant products the overwhelming majority of the wholesale and retail markets (i.e. other than for school use) would still be available for these companies to compete in. As such, the overall effects on competition are expected to be limited.

8. Enforcement, sanctions and monitoring

8.1. Options 1 ('do nothing') and 2 ('voluntary') would require no enforcement and carry no sanctions, as the action required is voluntary. Option 3 would require implementation and enforcement by local authorities or others enforcing food law.

8.2. The Agency is working with Education Departments in relation to tracking improvements in school meals. In addition, the proposed National Diet and Nutrition Survey (NDNS) rolling programme could be used to monitor the overall food consumption and nutrient intakes of children of school age. This will allow areas of potential concern (for example, inadequate intakes of particular nutrients) to be identified and appropriate action taken.

9. Implementation and delivery plan

9.1. Under the preferred option of introducing voluntary TNS, implementation and delivery rests with the school meal supply chain. We envisage reformulation of products would take place over time as part of manufacturers regular review of product lines. Reference to TNS, in whole or in part, by those providing or procuring school meals as that provision is reviewed would provide a driver for this work.

³¹ Food Standards Agency's Mini – Surveys. Available at <http://www.food.gov.uk/science/101717/minisurveys/>

9.2. The decision to use TNS and the timetable for this would therefore be for individual organisations to decide, and it would be inappropriate for the FSA to set milestones for this work. The FSA will, however, be monitoring the nutritional component of meals in schools, and children's nutrient intakes.

10. Post-implementation review

10.1. Refinement of these voluntary specifications may be required as experience is gained in their use. The FSA intends to review the TNS in 2008, in consultation with stakeholders to enable open discussion of the impact of the voluntary TNS.

11. Summary and recommendation

11.1. A table to summarise costs and benefits has not been prepared as no significant directly policy related costs have been identified.

11.2. The health impacts of current intakes of saturated fat, non-milk extrinsic sugars and salt by children described above, show that Option 1, to "do nothing", cannot be sustained. Setting TNS would provide a reference tool for caterers and procurers of school meals when selecting products to use, and also provide a benchmark for manufacturers when reviewing product ranges or considering reformulation. A voluntary approach would build on work already being done to reformulate manufactured foods and allow flexibility to incorporate further work into normal business cycles. Legislation to set specifications would not be practical or reasonable given the work already being done and the potential administrative and financial burdens it would place on business.

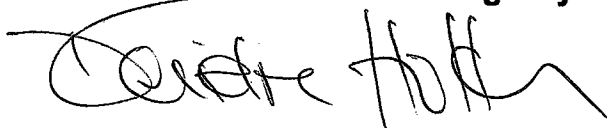
11.3. It is therefore recommended that the FSA publish voluntary TNS (option 2).

Declaration

This declaration is signed by the FSA Chair, in recognition of the fact that the FSA is issuing guidance using its powers under section 7 of the Food Standards Act 1999. This Regulatory Impact Assessment demonstrates that the FSA has satisfied its obligations under section 23 of the Act.

I have read the regulatory impact assessment and I am satisfied that the benefits justify the costs

Signed by the Chair of the Food Standards Agency



18 May 2006

Date

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