# Welsh Assembly Government

Department for Children, Education, Lifelong Learning and Skills

Financial appraisal of the proposed Healthy Eating in Schools (Wales) Measure 2008

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# Background and summary findings

#### Context

- In June 2007, Assembly Member Jenny Randerson was successful in the first ballot held in the National Assembly for Wales ('the Assembly') for the right to seek agreement to introduce a Member proposed Assembly Measure. The title of this first proposed Measure is the *Proposed Healthy Eating in Schools (Wales) Measure 2008* ('the Measure').
- A draft measure and accompanying Explanatory Memorandum were introduced by Jenny Randerson AM on 14 March 2008 setting out the background to the provisions in the Measure and explaining its scope. The Explanatory Memorandum explains that the primary purpose of the proposed Measure is a holistic, comprehensive, made-in-Wales policy on nutrition, which ensures that healthy eating is promoted and supported for all registered pupils of schools maintained by local education authorities in Wales.
- 3 Several of the recommendations in the Welsh Assembly Government ('the Assembly Government')'s *Appetite for Life* initiative would be encompassed in, and be given a statutory basis by, the proposed Measure. An *Appetite for Life* Action Plan was launched on 22 November 2007. It includes seven priority areas including the implementation of new nutrient, food and drink based standards in four local authority research project areas and to review, develop and establish monitoring and evaluation programmes to support the whole school approach to improving food and nutrition in schools. At the time of our report the research projects are ongoing within schools and the outcomes of the projects are not yet known.
- The proposed Measure was issued for consultation in January 2008 and responses were subsequently received. An Assembly Committee was established in April 2008 to consider and report on the general principles of the proposed Measure. The Committee published a Stage 1 Committee Report on the legislative proposals in October 2008. Their report states that the legislation should be 'progressed without delay.' In order to inform its work, the Committee carried out a public consultation which sought the views of pupils in schools throughout Wales and took oral evidence from key stakeholders.
- In the Stage 1 Committee Report, the Committee provides its view regarding the financial implications of the introduction of the Measure:
  - 'We note the Finance Committee's conclusions. However, in view of the concerns raised in evidence received by this Committee, in particular about the indirect costs associated with delivering higher nutritional standards, we suggest the Assembly Government explore fully the financial implications of implementing regulations provided for in the proposed Measure before they are made.'
- It is with this view of the Committee in mind that DCELLS commissioned PricewaterhouseCoopers LLP to undertake a financial appraisal of the proposed Measure.

# The Scope of the proposed Measure

In considering the implications of the proposed Measure, it is first necessary to understand its requirements and then consider the estimated costs associated with delivering each of its sections. The Explanatory Memorandum provides further information on the scope of the Measure and gives some detail on its requirements.

- The Explanatory Memorandum expands on each of the sections of the Measure that are considered to have cost implications. The most significant of those areas is Section 7 which concerns Requirements, by Regulations, for food and drink provided on school premises.
- The Measure does not set out in detail the content of food to be served in schools, including quantities of fat, sugar, salt and artificial additives. That may be done by the Minister through regulation. The reason for this approach is that nutritional requirements and guidelines change regularly. It is these indirect costs that were the concern of the Stage 1 Committee as there is uncertainty over what the nutritional standards are expected to be and the timescales over which they will be introduced, together with a lack of quality baseline and forecast data available.
- The scope of the Measure is much broader than legislating to ensure that nutritional standards are met. One emphasis of the Measure is on the promotion of healthy eating in schools, including the school curriculum, inspection of progress and reporting by governing bodies and Welsh Ministers. There are also specific requirements regarding the provision of free drinking water and free school meals. The Explanatory Memorandum expands upon each section of the Measure, together with commentary on the potential direct costs of implementing each of them.
- There are a number of strategies already in place as a result of the Assembly Government's *Appetite for Life* policies and Action Plan. The costs of these initiatives are already being accommodated in current Assembly Government *Appetite for Life* budgets. It is not always clear where *Appetite for Life* ends and the Measure begins and as such one of the challenges in undertaking a financial appraisal of the proposed Measure is to separate its impact from the activities that are currently funded under the existing *Appetite for Life* funding.
- The Measure itself is not prescriptive in the standards it expects or the level or type of, for example, promotional activity that is expected of local education authorities to be able to meet its requirements. It is expected that standards and guidance develop over time. There are a number of areas of the Measure where the standards required are not yet set and as such it is extremely difficult to quantify the estimated financial impact of the Measure in these areas.

# The Scope of our work, methodology and limitations

The scope of our work was to examine critically all of the proposals contained in the proposed Measure to evaluate and identify any potential cost implications.

# Methodology

- To obtain the data required for our work, we surveyed all 22 local authorities in Wales in order to establish both baseline data and forecasts of the potential impact of the Measure where possible. We also invited comments and undertook interviews with local authority catering managers and *Appetite for Life* leads. We also interviewed Assembly Government officials and the *Appetite for Life* Co-ordinator of the Welsh Local Government Association.
- Due to the relative lack of robust data relating to special schools and pupil referral units (PRUs), our work deals with the impact of the Measure on mainstream state funded primary and secondary schools only. Our methodology is explained in more detail in Appendix A.

# Limitations

- A number of assumptions have been made in order for us to quantify the potential impact of the Measure. We received 19 responses to our survey, although not every question was answered in each survey. We have not verified any of the information, which we have received. We have applied extrapolation to some of the data received from authorities. No two local authority catering services are the same and the configuration of schools provision also varies within and from authority to authority. There are limitations therefore of using an average extrapolation approach.
- 17 We have undertaken our analysis at 2007/08 prices as this is the last complete financial year for which

financial information is available. We have not taken into account food price or pay inflation subsequent to the end of the 2007/08 financial year.

- We have not sought to analyse the impact, on the costs, of changes in demand as a result of implementing the Measure or of demographic changes and have not made adjustments to estimated costs to take into account the possible effect of such changes. For example, effective promotional and marketing activity may have a positive impact on demand which, in turn, may result in increased ingredient and other catering costs to provide more meals. There is also anecdotal evidence of demand falling dramatically upon the introduction of healthier food options in Wales and other parts of the UK, which would have the opposite effect. Furthermore, the requirement for refurbishment of kitchen and/or dining facilities is also to a significant extent dependent on delivery models and demand as facilities need to be fit for the purpose of providing meals to the level of demand anticipated.
- The proposed Measure does not set out in detail the type and standard of food to be provided by schools. Ministers would be able to specify standards in supplementary regulations, and it is envisaged in the Explanatory Memorandum that an incremental approach would be taken to do this. We have assumed for the purpose of our report that the nutritional standards that will be initially required will be those included in the *Appetite for Life* Action Plan. It is expected that the standards will change over time and therefore the cost of meeting them is likely to change. We have not sought to take this into account.
- 20 Events and circumstances frequently do not occur as expected, therefore, there will usually be differences between forecast estimates and actual results, and those differences may be material. We take no responsibility for the achievement of the forecast estimates contained in this report. The assumptions that we have made for the purpose of our report are detailed further within the narrative of the report and in Appendix B.

# **Summary findings**

The Detailed Findings section of this report details the results of our financial appraisal of each of the sections of the Measure. The following table summarises the estimated financial impact of each section of the Measure. The figures are indicative and not absolute and come with a 'health warning'. The figures cannot be understood in isolation, but only in context and with an appreciation of the methodology used to generate them and the associated assumptions and limitations, as set out in more detail in the body of this report.

Section of the Measure	Comments	Cost range
Duties in relation to the promotion of healthy eating in schools (section 1)	If the current level of funding and expenditure is expected by Welsh Ministers in order to achieve the requirements of the Measure, the lower end of the estimated additional cost is nil. Should the level of promotional and marketing activity be expected at the level of the highest spending authority in 2009/10 then the additional cost across Wales could be in the region of £1.5m per annum. The upper end of the financial impact could be higher, depending upon the level of activity and staffing required to follow the guidance to be issued by Welsh Ministers.	Nil to £1.5m or higher per annum
Further duty on the Welsh Ministers (section 2)	If the current curriculum is considered to accommodate the requirement to promote healthy eating, the additional cost of the implementation of the Measure is nil, pending any changes to the curriculum. There may be cost implications for schools if the curriculum develops further to require practical cooking of healthy meals but this is not envisaged by Assembly Government officials at the time of our report. If cooking lessons are required in order to promote healthy eating the cost implications could be significant.	Nil, pending any changes to the curriculum

Section of the Measure	Comments	Cost range
Meaning of "healthy eating" (section 3)	The third part of the definition that considers sustainability could have wide-ranging and extensive cost considerations. It impacts on all stages of the supply chain and may require significant changes in purchasing policies for schools and local education authorities. The financial impact is therefore not possible to quantify at this stage.	Not possible to quantify at this stage
Inclusion in governors' reports of information on the promotion of healthy eating (section 4)	Half of those authorities that responded to this question in our survey stated that they considered that there would not be an incremental cost for governing bodies reporting under the Measure. The other half indicated that there would be some cost associated with training governing bodies in the key issues as a one-off cost. Based upon the results of our survey the cost of this section of the Measure is estimated to be in a range from nil to £0.4m.	Nil to £0.4m as a one off cost
Functions of the Chief Inspector of Schools (section 5)	The estimate figures in the Explanatory Memorandum were provided by Estyn based on the approach to inspection activity undertaken by the Scottish Executive. Any programme and scope of inspection activity in respect of healthy eating in Wales is not yet known and the estimates provided by Estyn do not include costs associated with training and monitoring or set-up costs for this new work. Therefore, the costs of increased regulation may be higher than those estimated in the Explanatory Memorandum, i.e. in excess of £0.1m to £0.3m per annum. The training and monitoring and set-up costs that may be incurred by Estyn will need to be taken into account. Also, there may be investment required by local education authorities in order to ensure that policies and procedures are updated and to ensure that procedures are in place to capture data on healthy eating activity that may be required by the inspectors.	May be higher than the estimate in the Explanatory Memorandum of £0.1m to £0.3m per annum
Reports by the Welsh Ministers (section 6)	It is expected that the duty to be placed on Ministers to report on healthy eating will be accommodated within existing reporting structures and budgets. Therefore, the additional cost of the implementation of the Measure is estimated to be nil.	Nil
Requirements by Regulations, for food and drink provided on school premises (section 7)	Our estimate of the financial impact of Section 7 of the proposed Measure covers five main areas. These costs could not be incurred in isolation from each other.  Ingredient costs  Based on the survey estimates received, we estimate that the total additional cost of ingredients for local education authorities to fully comply with the nutritional standards in the Appetite for Life Action Plan is in the region of £6.9m for meals provided at lunchtime. This estimate is based on a weighted average from the survey responses received. Survey respondents mainly consider food currently provided at breakfast clubs to achieve the required nutritional standards. Based on survey results of we estimate that the additional cost of providing more healthy meals at breakfast clubs could be in the region of £0.3m. Again, this estimate is based on a weighted average from the survey responses received.  Survey respondents stated that the costs of after school club catering is not known and is borne by schools and associations. As such the data is not centrally available to enable a financial appraisal of the impact of changes to the nutritional value of food provided on school premises at these activities. However, it is likely that there will be cost implications.	In the region of £6.9m for meals provided at lunchtime and £0.3m for meals at breakfast clubs per annum

Section of the Measure	Comments	Cost range
	Food preparation time	
	Based on the survey estimates received the estimated additional cost of extra food preparation time varied a great deal, from nil to 39p per meal. This results in a weighted average estimated cost of £2.1m for primary school meals in year one of implementation and £1.8m for secondary school meals (£3.9m in total). Also on a weighted average basis, the recurrent cost after year one is estimated to be £1.6m per annum for primary schools and £1.3m per annum for secondary schools.	An additional cost for food preparation time of the order of £3.9m in the first year and £2.9m per annum thereafter
	Training	
	The Assembly Government is currently providing £1.8m grant funding for training over two years. Respondents to our survey indicated that this level of funding would need to be maintained initially in order to ensure that the appropriate level of training is provided. The cost of this once the grant funding period has ended, if not already accommodated in future budgets, would be around £0.9m per annum. Recurrent costs to update training and train new staff may settle at a lower level.	Nil to £0.9m or higher per annum on training of catering staff
	A minority of authorities reported that they have provided some training to midday supervisors on healthy eating. However, as midday supervisors are not employed by the catering services, most authorities reported that they have not provided training. Therefore there may be additional costs of providing training to midday supervisors that have not been captured in the survey results.	
	(continued)	
Requirements by Regulations, for food and drink provided on school premises (section 7) (continued)	Monitoring healthy eating  Based on the weighted average of the survey estimates received, we estimate that the total additional cost of monitoring activity would be in the region of £0.8m in year one of implementation and £0.8m per annum after year one on a recurrent basis if a duty was introduced to monitor nutritional standards in schools and to monitor compliance with the future regulations.	Additional cost of monitoring activity in the region of £0.8m per annum
	Upgrading kitchen facilities	Evpanditura to
	There are alternative delivery models for providing school meals. These can range from cooking all meals on the school premises to a hub and spoke model or the complete outsourcing of supply with limited facilities at the school to serve the meals. We have not considered the different models for preparing school meals which may not require all schools to have the same standard kitchen facilities.	Expenditure to improve school kitchen facilities could be in the region of £94m over three years
	Local authority respondents estimate that a significant amount of financial investment is required in order to improve school kitchen facilities in order to be able to deliver healthy meals. The estimated costs across Wales could be in the region of £94m over three years.	
Drinking water in schools (section 8)	Based on the survey data received we estimate that the additional costs that may need to be incurred by schools in order to ensure that there is free drinking water available which is physically divorced from toilets could be in the range of £0.2m to £0.8m.	Range of £0.2m to £0.8m

Section of the Measure	Comments	Cost range
Promotion of meals in schools and other educational establishments (section 9)	Improvements to school dining rooms have been highlighted as a way of encouraging the take up of school meals. The costs that have been estimated by local authorities, based on limited survey data, for the improvements to dining rooms are estimated to be in the region of £45m over three years.	Expenditure to improvements to dining rooms could be in the region of £45m over three years
Encouraging take up of free school meals (section 9 (2))	It is currently unclear as to the ability of local education authorities to influence the take-up of free school meals in addition to the promotional and monitoring activity that is currently undertaken. Should Welsh Ministers require further activity to be undertaken there may be costs associated with increased promotional activity.  Local authorities surveyed did not highlight further activity that they consider should be undertaken and as such the cost of implementing this section of the Measure could be nil. It should be noted that we have not considered the impact on demand and hence the cost resulting from changes in demand patterns.	Range starting at nil.
Protection of the identity of pupils receiving free school lunches (section 10)	Based on survey results, we estimate that the initial cost of implementing cashless systems in secondary schools across Wales could be in the region of £3.2m and the recurrent cost of system support and administration could be in the region of £0.6m per annum. In the first year of implementation, therefore, the cost could be in the region of £3.8m. However, the adoption of a cashless system may also have associated recurrent savings, which have not been taken into account in these figures. Additionally, this cost would only be necessary if Welsh Ministers considered such an implementation programme to be appropriate.	If such systems were considered to be appropriate, then:  Nil to £3.2m to implement cashless systems; and  Nil to £0.6m system support and administration per annum

# **Detailed findings**

#### Introduction

- This section of the report details the results of our financial appraisal of each of the sections of the Measure. The methodology that we applied in order to calculate the estimates included in this section is shown in Appendix A.
- The main focus of our work was on the financial appraisal of section 7 which was highlighted by the Stage 1 Committee as an area which needed to be further explored. Our work also included an appraisal of the other sections of the Measure in order to assess its potential financial impact. Each of the sections of the Measure is considered in turn below.

# Duties in relation to the promotion of healthy eating in schools (section 1)

- Section 1 of the Measure provides for Welsh Ministers to issue guidance on how authorities exercise their functions in such a way as to promote healthy eating in schools, or during incidental activities such as visits or walks. The Explanatory Memorandum explains that it has been considered appropriate to provide this power to ensure that there is some consistency in the way in which the duty is applied.
- Our interviews with local authority *Appetite for Life* leads indicate strongly that promotion is not only a key part of the Measure itself, but also underpins the delivery of the *Appetite for Life* agenda and the movement towards improvements in the eating habits of school children.
- Grants are received by local authorities for promotional and marketing activity through *Appetite for Life* grant funding and through £10,000 provided to each authority by the Welsh Local Government Association ('WLGA'), also over two years. Local authorities are at different points in their promotion and marketing programme and the *Appetite for Life* monies made available to authorities are being used and promotional activity is being undertaken by many authorities in Wales. The key issue raised with us by local authorities that responded to our survey is the sustainability of funding for promotional activities.
- As it is not yet known what promotional and marketing activity would be required by Welsh Ministers it is not possible to assess accurately the costs that this section of the Measure could lead to. Furthermore, the information is not available from authorities to assess the effectiveness of the current level of promotional and marketing activity. It is clear that efforts are being made by local authorities to spend the current grant as effectively as possible but authorities are currently unable to demonstrate a link between the activity being undertaken and increased take-up of healthy school meals.
- The Explanatory Memorandum states that the costs of existing initiatives are already being accommodated in current Assembly Government *Appetite for Life* budgets. As there are many different forms of promotional activity and the level of such activity is, to a large extent, governed by the budget available, we asked local authorities to tell us what promotion activities are currently being undertaken under *Appetite for Life*. This provided a base level of activity that is currently being funded by grant. We also asked authorities to tell us about any other promotional activity that is being undertaken that is being funded from other sources. We then asked how authorities envisaged promotional and marketing activity, and associated costs would change if the Measure was implemented.

- The level of expenditure incurred in 2007/08 on promotional and marketing activity varied in a range from nil to £7.65 per pupil. From the 18 surveys received in this area there does not appear to be a clear link between the expenditure that is currently being incurred with the size of the authority's pupil population. The results of our survey indicate that the key driver for the level of expenditure in 2007/08 appeared to be the level of grant funding made available. Where respondents stated that nothing had been spent on promotion and marketing this was due to them not having secured grant funding within the 2007/08 financial year. We identified eight authorities, which had committed additional expenditure over and above the amount that they received in grant funding in 2007/08.
- We then asked how the level of expenditure was expected to change over the next two years, 2008/09 and 2009/10. The surveys received from authorities further reinforced the clear link between grant funding and expenditure and there is little evidence from our interviews of commitment in the current financial climate to commit sums to promote and market healthy eating over and above that received by grant.
- Exhibit 1 shows the promotion and marketing expenditure that is forecast by authorities in the current and next financial year.

Exhibit 1: Promotion of healthy eating in schools under current plans

Promotion of healthy eating per pupil	2008/09	2009/10
Lowest	£0.00	£0.00
Highest	£7.87	£5.13
Weighted average	£2.42	£1.74
% grant funded	79%	83%
% funded from local budgets	21%	17%

32 Exhibit 2 shows the current breakdown of promotional and marketing activity that is being undertaken by authorities. It shows the proportion of total expenditure by activity. We understand that the *Appetite for Life* research projects that are currently ongoing should identify areas of successful promotional activity. This should help to inform the development of guidance to support the Measure and frame the activities that are expected by Ministers.

Exhibit 2: Key promotional activities currently undertaken by local authorities

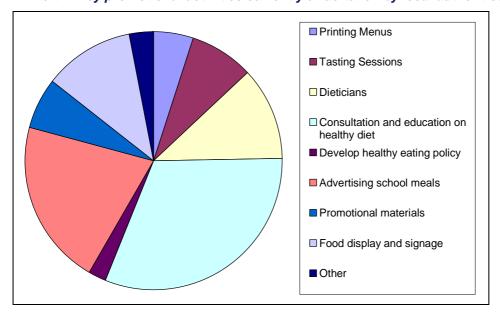


Exhibit 3 shows our estimate of the total expenditure for the current and next financial years under current funding streams, together with the upper end estimate of the potential cost if all authorities spent the highest amount per pupil planned by any authority.

Exhibit 3: Currently funded and estimated additional costs of promotion

Promotion of healthy eating	2008/09	2009/10
Estimated total expenditure under current plans (including estimates for authorities that did not respond)	£1,100,531	£789,078
Estimated total expenditure if all authorities spent the highest amount per pupil currently planned by any authority	£3,575,908	£2,330,367
Difference	£2,475,377	£1,541,289

- The lower end of this range could be lower as the initial investment undertaken by authorities in promotional activities on artwork and design, for example, is not required to the same extent. We have modelled the upper end of the estimate based on the most expensive current package of promotional activity per pupil. This package includes the higher proportional cost of nutritional and dietetic support, which a number of the survey respondents indicated would be required in order to sustain promotion of healthy eating.
- There may be sufficient scope within the guidance for authorities to implement this section of the Measure within the grant funding that is currently being given to them. The incremental cost of the implementation of the Measure may therefore be nil. The Measure does not indicate that there will be any assessment of the outcomes or the effectiveness of promotional and marketing activity and as such it is likely that authorities will continue to use the grant funding they receive and not commit expenditure above that level.

# Summary of estimated financial impact

If the current level of funding and expenditure is expected by Welsh Ministers in order to achieve the requirements of the Measure, the lower end of the estimated additional cost is **nil**. Should the level of promotional and marketing activity be expected at the level of the highest spending authority in 2009/10 then the additional cost across Wales could be in the region of £1.5m per annum. The upper end of the financial impact could be higher, depending upon the level of activity and staffing required to follow the guidance to be issued by Welsh Ministers.

# Further duty on the Welsh Ministers (section 2)

- 36 Section 2 of the Measure states that the Welsh Ministers must also exercise their functions relating to the curriculum in schools maintained by local education authorities so as to promote healthy eating. We discussed the estimated impact on the curriculum with officers from the Curriculum and Assessment Unit of DCELLS.
- 37 The current school curriculum contains specific requirements to teach learners about food and healthy eating and also identifies other opportunities to learn about these topics.
- In the Foundation Phase (3 to 7-years-old), the 'Personal and Social Development, Well-Being and Cultural Diversity' area of learning states that 'Children should be give opportunities to develop an understanding that the right types of food and drink are important for healthy bodies'.
- In design and technology, the place of food and practical skills has been given greater significance and status. Practical food preparation skills have been made compulsory at Key Stages 2 and 3 (7 to 14-year-olds) and food has been made a compulsory material at both key stages. Learners are encouraged to apply current healthy eating messages and to make informed choices when planning, preparing and cooking meals or products. They are given opportunities to use a broad range of skills, techniques and equipment to cook meals and products, and to plan and carry out cooking tasks safely and hygienically.

- In physical education, the first area of experience at all key stages is 'Health, fitness and well-being activities'. Within this area, learners should be given opportunities to identify how to eat and drink healthily in order to meet the energy requirements of different activities and to find out how exercise affects the body.
- In science, learners are provided with background evidence to health and well-being. At Key Stage 2, learners should be given opportunities to study the need for a variety of foods and exercise for human good health and, at Key Stage 3, they should study how food is used by the body as fuel during respiration and why the components of a balanced diet are needed for good health.
- In personal and social education, the 'Health and emotional well-being' theme has a clear emphasis on the importance of healthy eating with learners being required to understand the relationship between diet, exercise and good health.
- Support materials for schools are being produced to accompany the revised school curriculum and the guidance document 'Food and Fitness in the School Curriculum in Wales' has recently been sent to schools as part of this package.
- Therefore, in revising the curriculum (being implemented in schools from September 2008) opportunities have been taken to give more emphasis to and strengthen the requirements regarding food and healthy eating. As such it is not anticipated by the Curriculum and Assessment Unit of DCELLS that any further changes to the curriculum would be required as a result of the Measure.
- Should the introduction of the Measure lead to the requirement for cooking lessons in schools to be included in the curriculum in order to promote healthy eating, the costs involved to ensure that school facilities are able to offer the lessons required could be significant. At the time of our report this has not yet been determined and the baseline data is not available to assess the possible cost of such a change to the curriculum.

# Summary of estimated financial impact

If the current curriculum is considered to accommodate the requirement to promote healthy eating, the additional cost of the implementation of the Measure is **nil**, pending any changes to the curriculum. There may be cost implications for schools if the curriculum develops further to require practical cooking of healthy meals but this is not envisaged by Assembly Government officials at the time of our report. If cooking lessons are required in order to promote healthy eating the cost implications could be significant.

# Meaning of "healthy eating" (section 3)

- In the Measure "healthy eating" is defined as eating (and drinking) food (and drink) whose nature, quality and quantity
  - a) benefit the health of the person consuming it;
  - b) do not damage the health of the person consuming it; and
  - c) cause as little damage as is reasonably possible to the environment during the course of its production, processing and distribution.
- We have assumed that the first two parts of the definition, a) and b) are met by the introduction of nutritional standards considered in section 7 which covers food and drink regulations. However, the third part, c), is not referred to further in the Measure and its financial implications are not considered by the Explanatory Memorandum.

It is the third part of the definition that addresses the issue of sustainability in the process for providing school meals. The Stage 1 Committee Report states the view of the Committee:

'While we support the intention to incorporate the principles of sustainability in the proposed Measure we would not want this to be a barrier to its success. We remain unconvinced that Section 3 is the appropriate place within the proposed Measure to promote the principles of sustainability'

- In our interviews with catering managers we identified some examples of local sourcing of produce which have been piloted by local authorities, which resulted in potentially significant cost increases. However, these are examples of individual ingredients within a wide range of menu items and as such it would not be appropriate to attempt to quantify such examples on an all-Wales basis.
- Furthermore, some authorities rely on their purchasing power, either individually or with other authorities, in order to secure bulk buy discounts. Contracts that have been entered into in order to ensure such discounts may need to be renegotiated or terminated if it is considered that the production, processing and/or distribution of the products causes more damage to the environment than is acceptable under this section of the Measure. The costs of such renegotiations or terminations cannot be assessed at this point on an all-Wales basis. Nevertheless, this is a further consideration of the potential financial impact of this section of the Measure as it currently stands.
- The third part of the definition could have extensive and significant cost implications, depending on how it is interpreted further by Welsh Ministers. We have not considered the financial implications of this section any further given the uncertainty regarding its future and time available to us to undertake our work. A financial appraisal of the impact of sustainability provisions on current catering arrangements is a very wide-ranging and extensive piece of work that is not possible to quantify at this stage.

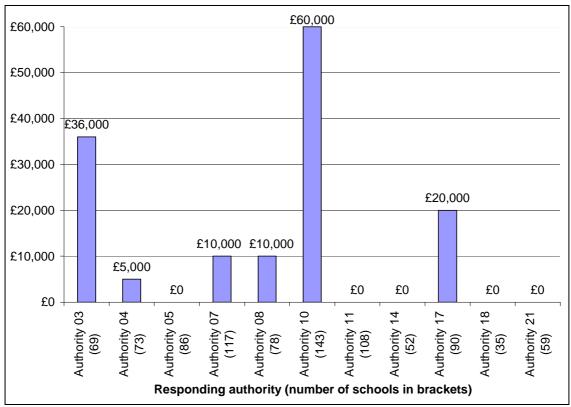
#### Summary of estimated financial impact

The third part of the definition that considers sustainability could have wide-ranging and extensive cost considerations. It impacts on all stages of the supply chain and may require significant changes in purchasing policies for schools and local education authorities. **The financial impact is therefore not possible to quantify at this stage.** 

# Inclusion in governors' reports of information on the promotion of healthy eating (section 4)

- This section of the Measure requires amendment to Section 30 of the 2002 Act by inserting the requirement for a governors' report to describe what steps have been taken to promote healthy eating in the school during the period to which the report relates and on the extent to which those steps appear to have been successful.
- We asked authorities whether they considered that there would be additional costs associated with this section of the Measure. Exhibit 4 shows the results that we received.





- Five respondents did not consider that there would be additional costs of reporting as it would be absorbed into the existing administration and reporting processes. Those authorities that identified an increase in costs considered the costs of training and support for governors in order to ensure that they are aware of the issues involved.
- Many of the local authorities that responded identified a need to raise the profile of healthy eating in schools with governors and head teachers. Those authorities that identified a cost of reporting by governors on healthy eating identified this as an initial cost to achieve increased buy-in to the healthy eating agenda.
- This requirement begins to address the issue of how the success of the Measure and developments in healthy eating are to be measured and reported upon. The inclusion of a description of what steps have been taken to promote health eating at a high level in a governors' report would not have significant financial implications. The Explanatory Memorandum anticipates that this will be accommodated within current reporting structures.
- 57 The average cost per school from the authorities that considered there will be a cost for providing governor support was £256. If all schools in Wales incurred this cost the total expenditure would be £445,000.

#### Summary of estimated financial impact

Half of those authorities that responded to this question in our survey stated that they considered that there would not be an incremental cost for governing bodies reporting under the Measure. The other half indicated that there would be some cost associated with training governing bodies in the key issues as a one-off cost. Based upon the results of our survey the cost of this section of the Measure is estimated to be in a range from **nil to £445,000**.

# **Functions of the Chief Inspector of Schools (section 5)**

- As part of current inspection arrangements, Estyn inspectors consider whether the school has appropriate arrangements that encourage and enable learners to be healthy. This section of the Measure places a requirement on Estyn to specifically inspect healthy eating in schools as part of its programme.
- Calculations were provided by Estyn for the Explanatory Memorandum based on the experience of HM Inspectorate of Education in Scotland. A range of between £100,000 and £250,000 is given as the potential cost, dependent upon the number of inspections that would be required. These estimates do not include additional administrative costs, costs associated with training and monitoring or set up costs for this new work. We have been unable to verify whether the estimates provided by Estyn remain appropriate or need revision.
- The costs of inspection are both borne by the inspector and the inspected. Inspectors rely on evidence upon which they draw their conclusions. The evidence needs to be available to them at schools. In our interviews with local authority representatives we identified that arrangements appear to be in place within authorities to monitor progress, which could be made available to inspectors. These arrangements differ from authority to authority.
- There may be a cost for some authorities in ensuring that processes are in place to update policies and procedures to take healthy eating into account to the standards required and in procedures for capturing data that may be required by inspectors. Further consideration of the financial impact of monitoring of progress is undertaken in Section 7 below.

#### **Summary of estimated financial impact**

The estimate figures in the Explanatory Memorandum were provided by Estyn based on the approach to inspection activity undertaken by the Scottish Executive. Any programme and scope of inspection activity in respect of healthy eating in Wales is not yet known and the estimates provided by Estyn do not include costs associated with training and monitoring or set-up costs for this new work. Therefore, the costs of increased regulation may be higher than those estimated in the Explanatory Memorandum, i.e. in excess of £0.1m to £0.3m per annum.

The training and monitoring and set-up costs that may be incurred by Estyn will need to be taken into account. Also, there may be investment required by local education authorities in order to ensure that policies and procedures are updated and to ensure that procedures are in place to capture data on healthy eating activity that may be required by the inspectors.

# Reports by the Welsh Ministers (section 6)

- The Measure places a requirement on the Welsh Ministers to lay a report at least annually before the Assembly setting out progress against the provisions of the Measure.
- It is expected in the Measure that the Minister will report to the National Assembly for Wales on a regular basis on progress against the *Appetite for Life* Action Plan. As such, it is not anticipated that the implementation of the Measure in itself will increase the reporting burden so as to lead to increased costs to the Assembly Government. In interviews with Assembly Government officials this assumption was not challenged.

# Summary of estimated financial impact

It is expected that the duty to be placed on Ministers to report on healthy eating will be accommodated within existing reporting structures and budgets. The additional cost of the implementation of the Measure is therefore estimated to be **nil**.

# Requirements, by Regulations, for food and drink provided on school premises (section 7)

The proposed Measure does not set out in detail the type and standard of food to be provided by schools.

Ministers would be able to specify standards in supplementary regulations, and it is envisaged in the Explanatory Memorandum that an incremental approach would be taken to do this.

- Nutritional standards for school lunches are currently specified in the Education (Nutritional Standards for School Lunches) (Wales) Regulations 2001. The *Appetite for Life* Action Plan sets out more stringent standards for food and drink available throughout the whole of the school day. The Action Plan suggests that schools wishing to set higher standards than those currently in place should work to those set out in the Action Plan (p8). To estimate the financial impact of future regulations we asked local authorities to estimate the costs of implementing the *Appetite for Life* food and nutritional standards.
- The actual costs of meeting future regulations will depend on the standards set, which may change with scientific advice, and would be incurred incrementally.
- We surveyed local authorities for their estimate of the impact of this section of the Measure in the following cost categories:
  - ingredient costs of school lunches, breakfast clubs and after school clubs;
  - food preparation time;
  - · training of catering staff;
  - · monitoring of healthy eating; and
  - · upgrading kitchen facilities.

Each of these cost categories are considered in turn below.

#### Ingredient costs - school lunches

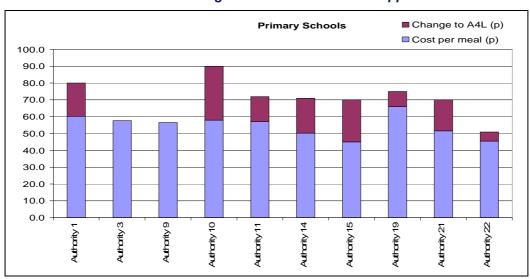
- In our survey we asked respondents to indicate the average cost of food ingredients for primary and secondary school meals. The nature of school meal provision at secondary level is fundamentally different from that at primary level. The concept of a standard, two course meal is not as prevalent in secondary schools. We therefore asked respondents to provide the average ingredient cost per pupil served. We received 16 survey responses in this area covering both primary schools and secondary schools.
- At the primary level, the estimates ranged from 45p to 67p. The weighted average cost per meal was 55p. The LACA/ Assembly Government School Meals Survey conducted in December 2008 shows that the average ingredient cost per meal in 2007/08 was 54p for primary schools, which is consistent with the information we have gathered.
- At the secondary level, the estimates ranged from 55p to £1.30. The weighted average cost per meal was 74p. The LACA/ Assembly Government survey showed an average cost per meal for secondary schools of 76p, which is 2.7% higher than the estimate from our survey data. The difference may be caused by a number of factors, including the different coverage of authorities in the surveys and different interpretations of what constitutes a "meal" for secondary schools.
- 71 A summary of the responses is in Exhibit 5:

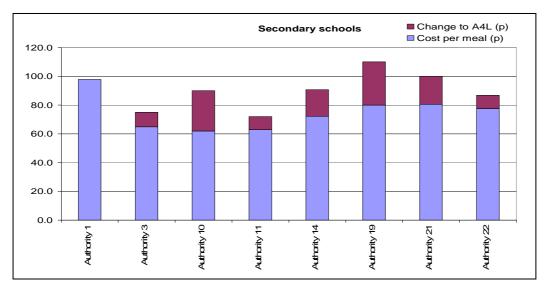
Exhibit 5: Current ingredient costs per meal

Ingredient costs per meal	Primary schools	Secondary schools
Lowest	£0.45	£0.55
Highest	£0.67	£1.30
Weighted average per meal served	£0.55	£0.74

We then asked respondents what they thought the additional ingredient costs per meal would be if the Appetite for Life standards were to be implemented fully. Exhibit 6 below highlights both a variation in the current ingredient cost per meal, which is expected, and a variation in the ingredient cost per meal to meet the Appetite for Life standards.

Exhibit 6: Estimated additional ingredient costs to achieve Appetite for Life standards





73 The summary results of the survey are shown in Exhibit 7.

Exhibit 7: Projected additional ingredient costs per meal to achieve the Appetite for Life standards

Additional ingredient costs per meal to reach all Appetite for Life standards	Primary schools	Secondary schools
Lowest	£0.00	£0.00
Highest	£0.32	£0.30
Weighted average per meal served	£0.16	£0.16
% average increase in ingredient costs	28%	22%
Estimated total increase in ingredient costs for all authorities	£3,343,655	£3,529,627

- At the primary level, the estimates ranged from 0p to 32p. The weighted average increase per meal was 16p which represents an increase of 28%.
- For secondary schools, the estimates ranged from 0p to 30p. The weighted average increase per meal was 16p which represents an increase of 22%.
- At the current level of school meals served, this represents a total increase in ingredients costs of £6.9m at 2007/08 prices. This estimate is contingent on, among other factors, the level of demand for school meals. We have estimated the ingredient cost based on the current level of school meals served. In our survey we asked local authorities to comment on their expectation of the impact of the introduction of the Measure on the level of demand for school meals.
- 77 Views of respondents varied a great deal and it is apparent that the situation is different from school to school within and between local authorities. Nine authorities responded to this question. Five indicated that there would be a decrease in demand, two indicated that there would be an increase (one estimated an increase of 5% in the first year, the other did not quantify the increase) and two indicated that there would be no effect. The range of the fall in demand estimated, by the local authorities who responded, in year one of implementation of the Measure ranged from -5% to -12.5%.
- Should demand for school meals fall the estimates for the increase in ingredient costs may be lower. However, if less income is received from a fall in sales of school meals costs of overheads such as catering staff costs and facilities costs may not be matched by income and as such there will be an adverse financial effect. Furthermore, the level of expenditure required to refurbish kitchen and dining facilities that is estimated in this report based on survey returns is also in part dependent on the demand, although demand may rise if such refurbishments make the experience of taking a school meal more attractive. Due to the multiple and variable effects of changes in demand on the different sections of the Measure we have not modelled the impact of demand. However, further consideration may need to be given to its impact and monitoring of the level of demand as the provisions of the Measure are implemented will be important in order to continue to assess its financial impact.

#### Ingredient costs - breakfast clubs

- 79 The Assembly Government provides funding for free breakfasts in primary schools. Separate guidance has been issued by the Assembly Government on the type and portion size of food to provide a healthy breakfast. Section 7 (9) of the proposed Measure would allow different regulations to be set for different periods of the day. It is anticipated by DCELLS that the current standards for breakfast would continue.
- Ten authorities provided information on take up of breakfasts. The responses varied greatly, but on average the number of breakfasts served was 24% of the number of lunches served. The weighted average cost per primary school breakfast was 25p. The response ranged from between 10p to 45p.
- Three authorities estimated the additional ingredient costs for breakfasts if they needed to improve standards. Two of the authorities said there would be no increase. One authority reported that an increase of 8p per breakfast would be required. This is a small number of responses to make an estimate for the rest of Wales. The weighted average increase in ingredients for the three authorities that gave an estimate is 5p.
- Assuming that the number of breakfasts served is 24% of the number of lunches served, the potential increase in cost for primary school breakfast clubs at £0.05 per meal is £272,000. However, some authorities that did not respond to this question in the survey stated in further interviews that there may not be a significant increase in ingredient costs for breakfast clubs.

# Ingredient costs – after school clubs and other food consumed on school premises

- None of the responding authorities reported that they provide catering for after school clubs, and there is little, central information available on the food provided by schools or club organisers.
- The Measure may have an impact on the food provided at after school clubs. However, we are unable to

quantify its financial impact due to the lack of available data on the current provision of food and drink at after school clubs.

In our interviews a number of local authority representatives mentioned the potential problem of vending machines, for example, providing income to schools which is used to support school activities. It is expected that schools would not want to lose this source of income from selling snacks and soft drinks. We could not identify any statistics on the estimated number of vending machines in schools and the current income from those machines. However, this area appears to be a barrier that will need to be overcome in many schools.

## Food preparation time

- Several respondents indicated that staff would require additional time to prepare fresh produce. Using information provided by respondents, we have estimated the additional cost that would result from increasing working hours.
- Six authorities provided financial estimates of the additional costs, if any, relating to additional food preparation time. Exhibit 8 summarises the responses:

Exhibit 8: Estimated additional food preparation time

	Initial	Recurrent
Additional cost per meal:		
Lowest	£0.00	£0.00
Highest	£0.39	£0.39
Weighted average	£0.10	£0.07
Estimated total cost (using average cost per meal)	£3,908,753	£2,895,666

If a weighted average is applied, at the current levels of take up, this would result in a total initial cost of £2.1m to prepare primary school meals and £1.8m to prepare secondary school meals, in year one of implementation. The estimated recurrent costs using a weighted average estimate would be £1.6m for primary schools and £1.3m for secondary schools from year two onwards.

# **Training**

- We assessed the extent to which additional training might be required for the school catering workforce. We asked respondents about training that is provided at the moment and whether any additional training will be required. We focussed on the additional training requirement to enable staff to deliver healthy meals, rather than health and safety and other training that would be undertaken as a matter of course.
- We did not distinguish between the needs of the primary school workforce and the secondary school workforce separately. We received 14 survey responses about training.
- 91 The average training cost per meal on training in 2007/08 was 3p. Responses ranged from 1p to 6p. Local authorities indicated in survey responses that a recurrent training budget would be required in order to ensure that catering staff continue to be fully appraised of developments in nutritional standards and preparation techniques. Exhibit 10 shows a summary of the survey responses.

Exhibit 10: Training costs

Cost per meal	2007/08 costs	Initial additional costs	Recurrent additional costs
Lowest	£0.01	£0.01	£0.00
Highest	£0.06	£0.06	£0.05
Weighted average	£0.03	£0.02	£0.01

- 92 Estimated total expenditure on training in 2007/08 was £1,264,882.
- The Assembly Government gave local authorities training grants totalling £1,789,972 over the two calendar years of 2007 and 2008. As the grant periods did not coincide with the financial years, the survey responses for 2007/08 include grant expenditure include some of the 2007 and 2008 allocations.
- The implication of these figures is that on average authorities expect to continue the current training levels if the funding is available. Our survey results and our interviews with local authorities suggested that recurrent costs, to update training and train new staff, may settle at a lower level once all staff have been trained to the same level.
- To prepare nutritionally balanced meals to the potential standards of the Measure and future regulations, authorities stated that they would need to spend a similar amount initially, i.e. 2p per meal on average. Responses again ranged from 1p to 6p.
- The responses indicated that a weighted average of 1p per meal would subsequently need to be spent on a recurrent basis, to continue preparing meals to this standard.
- 97 A minority of authorities reported that they have provided some training to midday supervisors on healthy eating. However, as midday supervisors are not employed by the catering services, most authorities reported that they have not provided training. Therefore, there may be additional costs of providing training to midday supervisors that have not been captured in the survey results.

#### Monitoring healthy eating

- We asked local authorities how they currently monitor the nutritional value of school meals and healthy eating in schools. We also asked if any additional costs would be incurred if a duty was introduced for them to monitor nutritional standards in schools and compliance with the future regulations.
- 99 If the focus of the Measure is to be on measurable outcomes and periodic assessment of new national and local indicators of success, systems may need to be put in place to record and analyse information on healthy eating and as such, there would be an associated cost.
- The Saffron system is currently available to all authorities in Wales for them to assess menus against the nutritional standards suggested in the *Appetite for Life* Action Plan. The system is currently being used to different levels by authorities and, as such, if this is to be used as the basis for assessing progress against nutritional standards there will be some degree of investment required at some authorities in order to ensure that training is up to date.
- 101 Based upon the 13 survey responses to this question, the average cost per pupil from the survey results is shown in Exhibit 11:

Exhibit 11: Estimated costs of monitoring activities

Cost per pupil	2007/08 costs	Initial additional costs	Recurrent additional costs
Lowest	£0.00	£0.00	£0.00
Highest	£16.18	£4.41	£3.47
Weighted average	£1.53	£1.87	£1.75

	Initial additional costs	Recurrent additional costs
Estimated total expenditure if all authorities spent the average additional amount per pupil	£849,918	£795,469
Estimated total expenditure if all authorities spent the highest additional amount per pupil	£2,004,107	£1,577,365
Difference	£1,154,189	£781,896

The monitoring activities reported in the survey varied considerably across local authorities. Some respondents indicated that monitoring had been absorbed into existing roles. Others reported that dietician or nutritionist support was required. Many respondents stated that nutritional expertise needs to be available to capture the nutritional analysis necessary for input to the Saffron system, although this is not the view of all respondents.

# **Upgrading kitchen facilities**

- There are alternative delivery models for providing school meals. These can range from cooking all meals on the school premises to a hub and spoke model or the complete outsourcing of supply with limited facilities at the school to serve the meals. We have not considered the different models for preparing school meals which may not require all schools to have the same standard kitchen facilities.
- We asked local authorities to estimate the costs of improving existing kitchen facilities in order to be able to prepare meals to higher nutritional standards. Eleven local authorities responded to this question. Respondents provided a wide range of estimates, which was expected due to the varying condition of premises across Wales. The estimate of costs over the three year period from 2009/10 to 20011/12 varied from £0 to £237,288 for expenditure in a financial year on school kitchen improvements. Exhibit 12 shows a summary of the estimates received.

Exhibit 12: Estimated costs of improving school kitchen facilities

Kitchens	2008/09	2009/10	2010/11	2011/12
Average spend per school:				
Lowest	£0	£1,316	£0	£0
Highest	£6,508	£237,288	£34,824	£49,206
Weighted average	£2,177	£28,644	£11,269	£14,179
Estimated total spend (including averaged estimates of local authorities who did not respond)	£3,782,960	£49,782,743	£19,585,488	£24,643,108

- 105 We estimate based on the survey data received that the total cost of improvements to school kitchen facilities could be £94m over three years.
- Estimates of refurbishing a kitchen ranged from £40,000 to £92,000, rising to £150,000 to install a completely new kitchen in schools that currently have limited facilities.
- Three of the authorities interviewed had undertaken detailed condition surveys of some or all of their catering facilities in the past two years. For the remaining authorities there is some uncertainty surrounding these estimates and significantly more research work would need to be undertaken to ensure the robustness of these results. In particular, there needs to be accurate agreement on the scope of the Measure and the degree of renovation work and refurbishment work that the schools estate may require.
- 108 It is important to note that in some respects the extent to which kitchens require refurbishment or

extension will be dependent upon the success of the initiative. If there is a significant increase in the take up of school meals, then it is likely that a greater proportion of schools will require additional works to be undertaken. There is the related issue that in many schools (both primary and secondary) this is not always possible due to the historic conversion of kitchen space for alternative uses.

There is also an issue relating to the subjective nature of the relative assessment of refurbishment needs between authorities. This could have led some respondents to indicate that kitchens need total refurbishment, whereas in other authorities similar kitchens might be thought only to need partial updating and upgrading. The sample size for undertaking a robust benchmarking analysis did not allow for such comparisons and further research work would need to be undertaken in this area.

# Summary of estimated financial impact

Our estimate of the financial impact of the Section 7 covers five main areas:

# Ingredient costs

Based on the survey estimates received, we estimate that the total additional cost of ingredients for local education authorities to fully comply with the nutritional standards in the *Appetite for Life* Action Plan is in the region of £6.9m for meals provided at lunchtime. This estimate is based on a weighted average from the 10 survey responses received.

Survey respondents mainly consider food currently provided at breakfast clubs to achieve the required nutritional standards. Based on survey results of we estimate that the additional cost of providing more healthy meals at breakfast clubs could be in the region of £0.3m. Again, this estimate is based on a weighted average from the survey responses received.

Survey respondents stated that the costs of after school club catering is not known and is borne by schools and associations. As such the data is not centrally available to enable a financial appraisal of the impact of changes to the nutritional value of food provided on school premises at these activities. However, it is likely that there will be cost implications.

#### Food preparation time

Based on the survey estimates received the estimated additional cost of extra food preparation time varied a great deal, from nil to 39p per meal. This large variation results in a weighted average estimated cost of £2.1m for primary school meals in year one of implementation and £1.8m for secondary school meals (£3.9m in total). Also on a weighted average basis, the recurrent cost after year one is estimated to be £1.6m per annum for primary schools and £1.3m per annum for secondary schools.

Some respondents estimated that the labour cost of producing meals could increase by as much as 30%. If the increase were 30% in all authorities the cost could be as much as £12.6m per annum as compared to the combined initial cost of secondary and primary schools of £3.9m.

#### **Training**

The Assembly Government is currently providing £1.8m grant funding for training over two years. Respondents to our survey indicated that this level of funding would need to be maintained initially in order to ensure that the appropriate level of training is provided. The cost of this once the grant funding period has ended, if not already accommodated in future budgets, would be around £0.9m per annum. Recurrent costs to update training and train new staff may settle at a lower level.

A minority of authorities reported that they have provided some training to midday supervisors on healthy eating. However, as midday supervisors are not employed by the catering services, most authorities reported that they have not provided training. Therefore there may be additional costs of providing training to midday supervisors that have not been captured in the survey results.

# Monitoring healthy eating

Based on the weighted average of the survey estimates received, we estimate that the total additional cost of monitoring activity would be in the region of £0.8m in year one of implementation and £0.8m per annum after year one on a recurrent basis if a duty was introduced to monitor nutritional standards in schools and to monitor compliance with the future regulations. If the highest estimate was used then the respective figures are, £2.0m and £1.6m.

# **Upgrading kitchen facilities**

There are alternative delivery models for providing school meals. These can range from cooking all meals on the school premises to a hub and spoke model or the complete outsourcing of supply with limited facilities at the school to serve the meals. We have not considered the different models for preparing school meals which may not require all schools to have the same standard kitchen facilities.

Local authority respondents estimate that a significant amount of financial investment is required in order to improve school kitchen facilities in order to be able to deliver healthy meals. The estimated costs across Wales could be in the region of £94m over three years.

# **Drinking water in schools (section 8)**

- 111 The Measure places a duty on local education authorities to ensure that a supply of drinking water is available, free of charge, on the premises of any school which it maintains. Further guidance may be issued by Welsh Ministers under this subsection.
- 112 The Appetite for Life Action Plan recommends that water sources should be physically divorced from the toilets. We asked local authorities to tell us how many schools are currently without such water sources and received 11 responses:
- Eight authorities who submitted surveys indicated that they did not have information on drinking water provision in schools. Eight stated that all of their schools are likely to comply with the assumed standards. Three authorities responded that some of their schools do not meet the assumed standards.
- Two of these three authorities provided cost estimates for installing drinking facilities. The estimated costs per school were quite different (£692 to £2,500 per school), so it is difficult to build a representative cost from this data.
- The cost estimate of installing water coolers given in the Explanatory Memorandum was £586 per school. This is based on the Communities First funding provided to 384 schools in Wales as a result of the introduction of the Education (School Premises) Regulations 1999.
- In our interviews with local authority representatives it became clear that water coolers are not the only way to provide free water in schools. Other methods such as 'bottles on desk' programmes are also currently being used.
- 117 18% of schools in the eleven authorities that responded to this question were reported as not meeting the standard. If these authorities are representative of the remaining eleven, there would be approximately 313 schools not providing free drinking to pupils. Using the lower cost estimate of £692, which is similar to that given in the Explanatory Memorandum, gives a potential cost of £0.22m. Using the higher cost estimate of £2,500 gives a potential cost of £0.78m.

#### Summary of estimated financial impact

Based on the survey data received we estimate that the additional costs that may need to be incurred by schools in order to ensure that there is free drinking water available which is physically divorced from toilets could be in the range of £0.2m to £0.8m.

# Promotion of meals in schools and other educational establishments (section 9)

118 This section of the Measure places two duties on local education authorities. Our work focussed on each of these separately.

# Promotion of the availability of school meals (section 9 (1a))

This sub-section is linked with the first section of the Measure which concerns the promotion of healthy eating in schools. Whilst the first section of the Measure focuses on promotion of healthy eating in schools, this section focuses on promotion aimed at ensuring that as many pupils as possible take school

meals.

- The Appetite for Life Action Plan contains a commitment to promote and encourage the take up of school meals through a national and local marketing campaign. This marketing activity is currently being coordinated by the WLGA and is funded by monies provided by the Assembly Government. Based on our discussions with the WLGA it is not anticipated that the Measure will result in additional expenditure being required over and above that already proposed to implement the Appetite for Life Action Plan.
- 121 Promotion of the availability of school meals is currently being undertaken as schools catering services operate trading accounts and as such promotion and marketing is necessary in order to ensure that income is maximised. Many of the local authority representatives interviewed made the point that, particularly in secondary schools, the level of promotional activity varies depending on the approach of the school administration. The level and quality of promotion of availability of school meals, therefore, varies a great deal.
- Local education authorities surveyed view promotional activity on healthy eating and promotional activity on the availability of school meals largely as one and the same. Therefore, the financial appraisal of promotional and marketing activity in section 1 covers this sub-section.

#### Encouraging pupils to consume school meals (section 9 (1b))

123 Encouraging pupils to consume school meals is the other part of this sub-section. There are several aspects to encouraging the consumption of school meals, most notably quality, price and the environment within which the food is to be consumed.

#### The quality and taste of the meal

124 Local authority representatives told us that nutritional standards can be met relatively easily by caterers but this does not mean that demand for nutritionally balanced meals will be high if the quality and taste of the meals is not what is preferred by pupils. There is anecdotal evidence of demand falling dramatically upon the introduction of healthier food options in Wales and other parts of the UK.

## The price of the meal

- The price of the meal is a fundamental determinant of demand. The level of subsidy per meal given by local authorities varies. The most recent Local Authority Catering Association/ Assembly Government School Meals Survey 2008 quotes an average subsidy per primary school meal of 63p. The *Appetite for Life* grant funding that is being made available to local authorities must not be used to subsidise food costs.
- There is a clear view among local authorities that any increase in costs associated with providing healthier menus should not be passed on to the consumer as this is believed to have an adverse effect on demand.
- Our work has not considered pricing further but it should be clear that it is a major determinant of the cost effectiveness of providing healthier school meals and, therefore, the overall financial impact of the Measure. We have assumed for the purpose of our report that additional ingredient costs will not be passed on to the customer and as such, represent costs of the Measure in their entirety.

# The environment within which the food is to be consumed

- The presentation of the food made available, the access arrangements and the environment within which it is to be consumed are key determinants of demand for school meals.
- The Explanatory Memorandum explains that improvements to school dining rooms have been highlighted as a way of encouraging the take up of school meals by both the Assembly Government, the Department for Children, Schools and Families in England and the Scottish Executive. There is a general recognition that the standard of dining rooms varies significantly across Wales.

There is a general absence of detailed survey data on the condition of school kitchens and dining rooms. It is also not clear from the Measure if there will be recognised standards that will need to be met. We therefore asked local authorities to estimate the cost of the improvements that they consider necessary in order to encourage the uptake of school meals. We received eight responses to this question in our survey. The results of the survey are shown in Exhibit 13.

Exhibit 13: Estimated costs to upgrade dining facilities

Dining rooms	2008/09	2009/10	2010/11	2011/12
Average spend per school:				
Lowest	£0	£0	£0	£0
Highest	£6,260	£46,710	£46,710	£46,710
Weighted average	£1,522	£8,475	£8,840	£8,748
Estimated total spend (including averaged estimates of local authorities who did not respond)	£2,644,971	£14,729,747	£15,364,130	£15,204,223

- Respondents provided a wide range of estimates, which was expected due to the varying condition of premises across Wales. The estimate average spend per school over the three year period from 2009/10 to 20011/12 varied from £0 to £46,710.
- We estimate, based on the survey data received, that the total cost of improvements to dining facilities required to encourage uptake of school meals could be £45.3m over three years. Some schools were reported as having dining rooms with a capacity of 7.5% to 25% of school rolls. The limitations on these estimates are the same as for the estimates in Section 7 for upgrading kitchen facilities and are repeated here.
- Three of the authorities interviewed had undertaken detailed condition surveys of some or all of their catering facilities in the past two years. For the remaining authorities there is some uncertainty surrounding these estimates and significantly more research work would need to be undertaken to ensure the robustness of these results. In particular, there needs to be accurate agreement on the scope of the Measure and the degree of renovation work and refurbishment work that the schools estate may require.
- 134 There are also possible knock on effects associated with dining room refurbishment that have not been modelled explicitly. In particular, it is probable that improving the dining room infrastructure will result in increased take up rates, which in turn will increase the expected cost of ingredients and possible waste, but reduce the cost of preparation and training time on a per capita basis.
- It is important to note that in some respects the extent to which school dining rooms require refurbishment or extension will be dependent upon the success of the initiative. If there is a significant increase in the take up of school meals, then it is likely that a greater proportion of schools will require additional works to be undertaken.
- There is also an issue relating to the subjective nature of the relative assessment of refurbishment needs between authorities. This could have led some respondents to indicate that dining rooms need total refurbishment, whereas in other authorities similar dining rooms might be thought only to need partial updating and upgrading. The sample size for undertaking a robust benchmarking analysis did not allow for such comparisons and further research work would need to be undertaken in this area.
- The "spend per school" figures are averaged out over all schools in the authority. In reality some schools will need more and some less (e.g. 30% of secondary schools in one authority interviewed have new catering facilities as they have been recently built).

## Summary of estimated financial impact

Improvements to school dining rooms have been highlighted as a way of encouraging the take up of school meals. The costs that have been estimated by local authorities, based on limited survey data, for the improvements to dining rooms are estimated to be in the region of £45.3m over three years.

# Encouraging take up of free school meals (section 9 (2))

- The Measure places a duty on local education authorities to take reasonable steps to ensure that every pupil who is entitled to receive school lunches free of charge receives those lunches.
- 139 The Explanatory Memorandum refers to research being undertaken aimed at identifying reasons affecting take up of free school meals. We discussed this research with the Research and Evaluation Branch of the Assembly Government's Department for Public Health and Health Professions. Results of the research indicate that the determinants of uptake are very similar to the uptake of school meals overall, for example, food preference, peer group and the environment. Statistical analysis, therefore, has not identified trend data that would indicate specific reasons for pupils that are entitled to free school meals not receiving them.
- The research undertaken to date in Wales has not identified the need for expenditure to be committed in order to improve the current arrangements that are in place to encourage the take up of free school meals.
- In our interviews with local authority representatives, we identified a number of different methods that are currently being undertaken in order to promote the take up of free school meals, including arranging for parents to visit the school and advertising and marketing campaigns. Many of those interviewed, however, indicated that the root causes of stigma that may be viewed by some parents are very difficult to address.

#### Summary of estimated financial impact

It is currently unclear as to the ability of local education authorities to influence the take-up of free school meals in addition to the promotional and monitoring activity that is currently undertaken. Should Welsh Ministers require further activity to be undertaken there may be costs associated with increased promotional activity. Local authorities surveyed did not highlight further activity that they consider should be undertaken and as such the cost of implementing this section of the Measure could be **nil**. It should be noted that we have not considered the impact on demand and hence the cost resulting from changes in demand patterns.

# Protection of the identity of pupils receiving free school lunches (section 10)

- 142 The Measure places a duty on local education authorities to take reasonable steps to ensure that the identity of pupils receiving free school meals is protected.
- The Explanatory Memorandum refers to a national application system which is currently being accommodated in existing budgets. Protection of pupils' identity can occur at two levels, at the application stage and at the school where the meal is received. The national system that is referred to in the Explanatory Memorandum concerns the application stage. As this is currently accounted for within existing budgets we have assumed that there is no further cost associated with the system.
- It is clear from the responses to our survey that there are a variety of arrangements in place within schools to administer free school meals. Existing arrangements throughout Wales do tend to make an attempt to protect the identity of pupils in receipt of free school meals. From survey responses it is clear that arrangements currently in place in primary schools may be appropriate and there is little investment needed. Primary school pupils do not tend to be given cash to bring to school with them and the administration of school meals is dealt with at school central offices in general by an administrator and, therefore, access to the free school meals list is restricted.

- 145 A number of secondary schools operate cashless systems, which many respondents consider to be effective in protecting the identity of pupils receiving school meals. Survey responses showed that 72% of secondary schools covered by the survey do not have systems in place to protect the identities of pupils receiving free school meals. We received 15 responses to this question in our survey.
- 146 Exhibit 14 shows the estimated gross cost of the implementation of cashless systems in those secondary schools.

Exhibit 14: Cashless systems

	Initial	Recurrent
Reported cost per secondary school:		
Lowest	£10,714	£2,083
Highest	£27,300	£4,565
Weighted average	£19,386	£4,061
Estimated total cost of implementing cashless systems in secondary schools	£3,194,347	£617,488

147 Further guidance on what is considered to be reasonable steps may be issued by Welsh Ministers in due course. Should cashless systems be required in those secondary schools that currently do not have them, we estimate that the initial cost to implement the hardware and operating systems across Wales could be £3.2m and the recurrent cost of system support and administration could be £0.6m. In the first year of implementation, therefore, the cost could be in the region of £3.8m. However, the adoption of a cashless system may also have associated recurrent savings, which have not been taken into account in these figures. Additionally, this cost would only be necessary if Welsh Ministers considered such an implementation programme to be appropriate.

# Summary of estimated financial impact

Based on survey results, we estimate that the initial cost of implementing cashless systems in secondary schools across Wales could be in the region of £3.2m and the recurrent cost of system support and administration could be in the region of £0.6m per annum. In the first year of implementation, therefore, the cost could be in the region of £3.8m. However, the adoption of a cashless system may also have associated recurrent savings, which have not been taken into account in these figures. Additionally, this cost would only be necessary if Welsh Ministers considered such an implementation programme to be appropriate.

# Other sections of the Measure (sections 11 to 16)

148 The further sections of the Measure deal largely with the legislative process which is part of the day-today business of the National Assembly. We have reviewed these sections in order to ensure that our financial appraisal of the Measure is complete. We have not considered the costs of the legislative process to pass the Measure and supplementary guidance and regulations and based upon interviews with officials we consider that there are no indirect costs of the provisions included within them.

#### Other financial considerations

#### **Food waste**

There are varying methods applied by local authorities to monitor the popularity of menus but all authorities should have arrangements in order to ensure that income is maximised. As such we do not expect that the Measure in itself will place a further financial burden on local authorities to monitor the effectiveness of menus but there could be cost implications, most notably in the level of food wasted, if menus are changed in a short period and they are not supported by the pupils.

- Authorities that have already attempted to introduce higher nutritional standards have reported that waste initially increased but has returned to normal levels. Other respondents in the survey indicated that food choices would be adjusted to reflect demand and so there would be little impact on waste.
- 151 In work that was previously undertaken for the Department for Education and Skills in England on the nutritional standards recommended by the Caroline Walker Trust, survey respondents advised that the issue of 'choice to the end' was discussed, but that no conclusions were drawn. Our work identified a significant potential cost issue that may need to be considered at some stage of the implementation of the Measure not so much in terms of caterers having to provide a range of meal choices right to the end of service, but more that it ought to be possible for a child at the end of service to still be able to select a meal or meal components that meet the nutritional standards. The estimate from that study is that the impact could be an increase in cost of as much as 2.5% per meal to cover wastage.
- The cost element associated with wastage is not a stand alone cost. The need to provide choice to the pupil spanning full lunchtime service results in the possibility of waste. To combat this, a reduced element of choice may be considered appropriate. However, this is likely to result in a lower take up rate especially amongst secondary school pupils, which will in turn reduce the recurring costs of meal provision (it also obviously contradicts the stated aims and objectives associated with implementing the recommendations).

## Food price inflation

In our survey we asked local authorities to provide costs per meal at 2007/08 prices. We asked for this as it is the last complete financial year. A number of those interviewed highlighted the recent increase in food price inflation which has inevitably led to an increase in ingredient cost per meal during 2008/09.

## Job evaluation and up-skilling

154 In our survey we asked local authorities to provide training and staff time costs at 2007/08 prices. We asked for this as it is the last complete financial year. A number of those interviewed highlighted the impact of authorities being at different points in their job evaluation processes which may account for a variation in costs throughout Wales.

# Appendix A: Methodology

#### General

- According to Schools in Wales: General Statistics 2008 (Assembly Government), there were approximately 1,509 primary schools in Wales with an associated pupil headcount of 261,607, and 222 secondary schools with a headcount of 206,936. There were also 44 LEA maintained special schools and 51 pupil referral units (PRUs) with a combined headcount of 4,687 pupils. Due to the relative lack of robust data relating to special schools and PRUs, this analysis deals with the impact of the Measure on mainstream state funded primary and secondary schools only.
- As there is little or no centrally collected information on school meals provision, the state of the school estate and the current or anticipated costs of provision apart from the eligibility and take up of free school meals, we surveyed all 22 local authorities in Wales. The sample includes respondents who are responsible for the provision of meals within their own authority and those responsible for the implementation of *Appetite for Life*.
- We received 19 responses from local authorities, although not every question was answered in each survey. We have not verified any of the information, which we have received. Throughout our analysis the responses were weighted according to the number of schools (and pupils) covered by the respondents. We also held face to face interviews with four local authorities and held telephone interviews with a further ten. In addition, we undertook desk based research to assess whether there was any recent and relevant publicly available information relating to the adoption of nutritional standards to help baseline the findings. This research was supplemented by interviews with Assembly Government officials and the *Appetite for Life* Co-ordinator of the Welsh Local Government Association.
- Given the timescale involved, the analysis only considered what were thought to be the most significant costs associated with implementation in primary and secondary schools. We did not consider the implementation of the guidelines in special schools or PRUs nor did we consider some of the actual implementation costs that might fall on central and local government such as the issuance of guidance or civil servants' time.

# Sample achieved and representativeness

- The 19 survey responses were received from local authorities, which together have 1,320 primary schools (87.5% of the Wales total), 193 secondary schools (86.9% of the Wales total). By pupil headcount the respondents have 225,276 primary school pupils catered for (86.1% of the Wales total) and 182,104 secondary school pupils catered for (88.0% of the Wales total). In terms of geographical representativeness, nine of the respondents are situated in South and East Wales, five are in Mid and West Wales and the remaining five are in North Wales.
- It is not possible to provide a fully accurate cost of the implementation of the Measure from a sample size of 19 local authorities despite the fact that this sample covers almost 87% of primary school pupils and 88% of secondary school pupils. Every school situation is in many respects unique and the results from the questionnaires that were sent out to local authorities reflect this view.
- Also, in each local authority, there is a different model of school meals provision. We have not been commissioned to discuss the various means of school provision but merely to analyse the information that we have collected in a meaningful way.

# Appendix B: Assumptions and limitation of scope

#### General

- We received 19 completed surveys from local authorities. In order to estimate the financial impact of the Measure it was therefore necessary to apply a degree of extrapolation based on the survey data received.
- In Appendix A we highlight that one local authority's schools catering service cannot be directly compared with another as they are configured differently. In order to arrive at estimated figures for the whole of Wales we have needed to establish a weighted average based on pupil or school numbers as appropriate and apply to the eight authorities that were unable to respond.
- The estimates provided by local authorities themselves were provided within short timescales and some are pure estimates without detailed analysis to support them. This is particularly prevalent in the assessment of the cost of improvement works to kitchens and dining rooms for which detailed condition survey data is generally unavailable.

## Verification

165 We have not verified any of the information, which we have received.

## **Demand**

- We have not sought to analyse the impact, on the costs, of changes in demand as a result of implementing the Measure or of demographic changes and have not made adjustments to estimated costs to take into account the possible effect of such changes. For example, effective promotional and marketing activity may have a positive impact on demand which, in turn, may result in increased ingredient and other catering costs to provide more meals, and there is anecdotal evidence of demand falling dramatically upon the introduction of healthier food options in Wales and other parts of the UK, which would have the opposite effect.
- Furthermore, the requirement for refurbishment of kitchen and/or dining facilities is also to a significant extent dependent on demand as facilities need to be fit for the purpose of providing meals to the level of demand anticipated.

#### Price inflation

We have conducted our financial appraisal wherever possible based on 2007/08 prices as this is the last complete financial year. Food price inflation subsequent to the end of the 2007/08 financial year has not been taken into account in this report.

# Job evaluation

We recognise that authorities are at different stages in their job evaluation exercises and as such the

estimates for costs of catering staff time between authorities differs by more than would be the case if job evaluation had been completed at all authorities.

# **Nutritional standards**

170 For the purpose of our report we have assumed that the nutritional standards that, using the Measure.

Ministers will initially require local education authorities to meet, will be those set out in the *Appetite for Life* Action Plan.

#### **Access to schools**

We have not considered the impact of healthy schools initiatives at the individual school level and have not contacted any school or governing body as part of our work.

# **Pricing**

172 Pricing is clearly a major determinant of demand upon which a number of the estimates in this report are contingent. We have assumed for the purpose of our report that increases in costs will not be passed on to the customer.

#### Refurbishment costs

- 173 Significantly more research work would need to be undertaken to ensure the robustness of the survey results. In particular, there needs to be accurate agreement on the scope of the Measure and the degree of renovation work and refurbishment work that the schools estate may require.
- 174 There are also possible knock on effects associated with kitchen and dining room refurbishment that have not been modelled explicitly. In particular, it is probable that improving the dining room infrastructure will result in increased take up rates, which in turn will increase the expected cost of ingredients and possible waste, but reduce the cost of preparation and training time on a per capita basis.
- 175 It is important to note that in some respects the extent to which kitchen and school dining rooms require refurbishment or extension will be dependent upon the success of the initiative. If there is a significant increase in the take up of school meals, then it is likely that a greater proportion of schools will require additional works to be undertaken. There is the related issue that in many schools (both primary and secondary) this is not always possible due to the historic conversion of kitchen space for alternative uses.
- There is also an issue relating to the subjective nature of the relative assessment of refurbishment needs between authorities. This could have led some respondents to indicate that kitchen and dining rooms need total refurbishment, whereas in other authorities similar kitchens and dining rooms might be thought only to need partial updating and upgrading. The sample size for undertaking a robust benchmarking analysis did not allow for such comparisons and further research work would need to be undertaken in this area. Similarly, we recognise that there are alternative delivery models for providing school meals. We have not considered the different models for preparing school meals which may not require all schools to have the same standard kitchen facilities.

# Appetite for Life funding

177 We have assumed that the current two year funding associated with *Appetite for Life* is not recurrent.

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