

# Examiners' Report Summer 2008

GCSE

GCSE Design & Technology: Food Technology (1970/3970)



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## GCSE Design & Technology: Food Technology Principal Moderator's Report June 2008 1970, Paper 01 (Coursework)

## **General Comments**

Once again, candidates produced well-organised folders so that the moderators could easily see the development from identifying a need through to the completion of the final product. It was a pleasure to look at many of the folders and this was commented on by all the moderating team. In most cases candidates used photographic evidence wisely to demonstrate the products they had made. This again helped the moderators to understand the thought processes of the candidates.

The following comments will apply to some centres but not all:

- Centres are still double crediting candidates in Criteria 2 and re-awarding the marks in Criteria 5. The board expects candidates to produce several initial design ideas and some of these should be produced candidates are then awarded marks for these ideas. Elements of these ideas are then developed and again these developments are produced and marked in criteria 2. The candidate then produces a final design proposal. All the marks available in Criteria 4, 5 and 6 are awarded solely against the production of the final product not any previous practical activities.
- Some centres are still allowing candidates to produce final products more suitable to KS3 work than KS4 work and marking the finished products too highly. It must be remembered that this course is an assessment of KS4 capability and as a result KS3 tasks - by their very nature less demanding - do not give full access to some of the assessment criteria.
- Photographic evidence was generally very good, however not all centres supplied photographs. Where final product photographs have been lost/deleted then it is recommended that the candidate remakes the dish as the marks of the teacher examiner can only be agreed if the evidence is in the folder. The best form of photographic evidence is when centres provide a range of manufacturing photographs as well as good views of the final product. Photographic evidence is very useful for key features 'select and use' and 'work safely.'
- Adherence to 18-20 page portfolios, as suggested by the guidance, continues to improve. Candidates were more selective with the information they included and pages were well presented to ensure good coverage of the paper. Very few centres allowed candidates to overrun by many pages however some candidates still produced folders in excess of 60 pages which is not necessary to gain the highest marks.
- Folders are getting more manageable every year and it was pleasing to note that no heavy folders were sent to the moderators. Centres should note that the spiral bound plastic attachments used to hold folders together often crack and break during delivery. The best form of securing folder pages together are through the use of treasury tags.

- Moderators reported that most centres sent the appropriate sample pieces of coursework, i.e. requested coursework and additional pieces to make up a representative selection from the centre. In some cases the highest and lowest candidates were not sent to the moderator. Some centres also sent a random sample over and above the request from the board this is not necessary.
- Standardisation within centres appeared to have been completed well this year in most centres.

## Administration

Generally, centres followed Edexcel's administration procedures with few difficulties. Moderators reported that a minority of problems were encountered in the following:

- addition errors in Candidate Mark Record Booklets (CMRBs)
- errors when transferring marks from CMRBs to OPTEMS
- no identification of page numbers in annotation column in CMRBs or on the candidates folder
- no names / centre numbers / candidates numbers on coursework pages this makes identification very difficult once CMRB's removed

## Criterion 1

Identify needs, use information sources to develop detailed specifications and criteria.

## Needs

Most candidates worked on appropriate needs which they had either identified themselves or had been given to them by the teacher. It is essential for each candidate to analyse and expand on given tasks if set by the centre. High marks cannot be awarded if the candidate has not moved the task on. Many candidates did not highlight their target group or they identified such a wide target group it made the access to the highest marks impossible e.g. 'my target group is teenagers'.

## Information

This key feature was done well by the majority of candidates. In most cases the candidates researched appropriate areas which related to the task they were investigating. In a few cases candidates had analysed products that are currently available in shops but which bore no relationship to their task. Although well-targeted product analysis is clearly valuable, it is of no value if it does not help to inform the candidate for their particular portfolio.

Centres had generally not allowed their candidates to spend a disproportionate amount of time producing repetitive or excessive amounts of information. Information sought, recorded and used well, included product analysis- shop surveys and product disassembly, questionnaires/market research, and selective background information on possible materials, components, means of construction and processing techniques. The research completed must allow the candidates to produce a detailed design specification for their proposed product, which they can justify from the research they have completed.

## Specification

This is an area where candidates often fail to reach the highest marks. Candidates must create the specification points themselves to gain high marks. Centre given and / or generic specification points are classed as teacher intervention and cannot be credited to candidates. Less able candidates may, however, need a guide or help to write suitable specification points but this teacher intervention must be acknowledged when awarding a level of achievement.

The specification must included measurable points and focuses on form, function, target market and budgetary constraints. Each point must be justified to gain the highest marks. It is also essential that the specification contain measurable points, which can be used to test the final product in criteria 6. These could include size of portion, calories content, fat content, reference to tolerance of size when producing products. Some candidates explained how they were going to achieve their specification points but did not give a reason for including them e.g. "the cost of my product will be between x and y because from my questionnaire/shop survey I have found out that...".

A few centres continue to mark their candidates' performance generously. To gain a high level mark candidates must produce a specification that contains descriptions relating to all of the following requirements of the product:

- form, e.g. portion size, type of ingredients, environmental issues, scale of production etc;
- function, e.g. type of product and it's purpose;
- **user requirements**, e.g. nutritional contribution, shelf life, means of preservation, reheating etc;
- **budgetary (cost) constraints**, e.g. price range, manufacturing and marketing costs.
- each description must contain more information than a simple statement and be justified from the evidence of research.

## Criterion 2

Develop ideas from the specification, check, review and modify as necessary to develop a product.

## Ideas

Ideas were generally well addressed although there was a tendency for some candidates not to show the link between the proposed ideas and the specification points already identified. Such examples of work could only gain the very lowest marks in the low-level band. To gain high level marks candidates need to present a range of realistic initial ideas. These should address form, function, user requirements and budgetary constraints as detailed in the specification. It is expected that candidates will make several of their initial ideas (model) so they understand the processes involved in the product and are then able to develop aspects of the idea. Although many candidates had made some products they did not always relate to the task being carried out. Some centres still need to ensure that the range of ideas suggested is diverse in respect of incorporating a variety of ingredients and processes and the dishes demonstrate KS4 rigour. A disappointing number of centres allowed candidates to suggest ideas more suited to KS3 than KS4, this can limit the candidate's access to higher level marks later in their coursework.

## Develop

Some excellent work was produced for this key feature. Some centres had guided their candidates carefully and enabled them to access the high level band of marks. Development work was seen to follow a logical sequence, which led to a final product. Development work with pasta, pastries, sauces, flours, fats were all seen addressing development of nutritional value, flavour, appearance, cost and portion size.

Unfortunately, a number of centres failed to address this criterion at all, candidates merely made an initial idea again and presented it as a final product. Several centres gave high marks when there was no practical evidence, just written statements. Clear aims were given to the developments being undertaken with altered recipes and detailed sensory testing with photographs. Other centres were generous in this area as high level marks were given when candidates just developed the taste and texture. Candidates must develop other areas of the specification for example, sensory modelling, costing, appearance, portion size etc. Some candidates tried to take forward more than one idea - this was difficult to undertake in the time allocation and to achieve high grades. Moderation of this criterion was easier when candidates included an introduction to each test on what they were modifying.

It must be remembered that to access the marks in this section, initial ideas must be **developed** this means 'changed' or 'moved-on' in the light of the evaluation of those initial ideas. Marks are only available for new information marks are not available for simply repeating the initial idea or for suggesting, and not actually carrying out, development ideas.

The final requirement of this section is a final design proposal which has moved-on significantly from the initial design ideas and is referenced back to the specification and includes all relevant information – e.g. ingredients, portion size; an annotated drawing, costing etc. This final design proposal is then referred to in Make Products where high marks are award for the final product matching the design proposal.

## Review

Review was generally marked accurately by centres. To satisfy the high level of this key feature, 'Ideas' need to be reviewed as they develop against the previously identified needs and design specification points. All reasoning must be explained when reducing the range of initial ideas down to a more selective group. Thorough testing against other specification points is needed, e.g. nutritional analysis, calculation of cost, review of time needed for preparation, user views on general acceptability of dishes, shelf life concerns etc., to access the higher level mark band. Candidate observation / opinion can be used as evidence and justification, but high marks cannot be awarded solely on the review of this limited evidence.

Care should be taken to guide candidates in their final choice of product and ensure they have the opportunity to demonstrate their competency at KS4; failure to do so will limit their access to marks.

## Criterion 3

Use written and graphical techniques including ICT and CAD where appropriate to generate, develop, model and communicate.

Many centres harshly marked this criterion. Candidate's presentation and communication skills have improved a lot in recent years. Moderators adjusted marks accordingly.

## Written Communication

Many candidates communicated information clearly and in a logical and wellorganised manner, although specialist vocabulary continues to be used infrequently. The moderators felt that many of the centres were rather mean when awarding marks in this area. This is an area where candidates can easily incorporate technical language is in describing the function of ingredients used in products, or when detailing the manufacturing processes relating to their product especially in an industrial situation.

## Other Media

The differentiation in this key feature lies within the skilfulness and accuracy shown by the candidate when presenting information. Candidates displayed suitable means of recording information, such as photographs, cut and paste items, tables, pie charts, bar charts, flow charts, brainstorming bubbles etc., but to gain top level marks, it is important the candidate aims to clearly and accurately communicate necessary information.

## ICT

Some excellent ICT was seen from many centres. Less able candidates seem to produce more creditworthy work when they word process it and / or when they use ICT graphics to present results. The use of nutritional analysis computer programmes produced valuable information as well as helping to address this particular key feature. The use of digital images of modelled food products was fairly common this year and the quality of such images has improved considerably.

## Criterion 4

Produce and use detailed working schedules, which include a range of industrial applications as well as the concepts of systems and control. Simulate production and assembly lines using appropriate ICT.

Marks allocated in criteria 4, 5 and 6 refer to work directly related to making the final finished product only and not previous trial ideas and development work.

## Systems and Control

This is still an area of confusion for many centres. It is expected to gain the highest marks that candidates will demonstrate an understanding of input, process, output

and feedback within a systems diagram. This information must be demonstrated in the form of a flow chart with each of these areas clearly labelled or identified through a 'key'. Within the feedback loop quality control points can be indicated and solutions to problems that have been encountered. The diagram must be fully related to the production of the candidate's own product. Generic diagrams looking at industrial production are not required.

## Schedule

These can be presented in the form of a chart or a flow diagram but they should relate fully to the making of the final product and should include all relevant information for successfully making the product. The schedule is the planning of practical work not a diary of 'what I did'. The schedule must refer to time in order to access both the medium and higher marks. To gain the high level mark candidates need to produce a time plan relating to production / manufacture of the product that includes consideration of some of the making processes, materials (functions of) and time projections and of where / when quality control will be applied. Where Gantt charts are used they should again only refer to the making of the final product (not the entire project) and they must indicate the time related to each block of work.

## Industrial Applications

Clear evidence was provided in the majority of folders. Some centres still include a generic HACCP and so marks cannot be awarded. There is also a lot of additional information, which is not required. Centres are reminded that a detailed HACCP alone can qualify for three marks. Some centres include lots of information on packaging and net diagrams, which must take considerable time for the candidate to produce and is more relevant to Graphics as well as information on how the final product would be produced in industry through high volume production. A common problem in this key feature is that candidates continue to produce very generic HACCP charts and manufacturing production plans rather than carrying out research and applying information to their chosen design idea. No marks can be awarded for a non-specific HACCP chart copied from a book.

## Criterion 5

# Select and use tools, equipment and processes effectively and safely to make single products and products in quantity. Use CAM appropriately.

This criterion has the highest weighting of marks and it is important that the necessary quantity and quality of evidence to support the marks awarded is provided in the folio. The marks in this criterion are only awarded from the production of the final product. There are no marks awarded for the production of previous initial ideas or development of ideas.

There were too many examples this year of candidates not thinking about their identified need. Many candidates had focused their need on healthy eating or reducing fat content of products - they then went onto produce items such as cheesecakes made with double cream and burgers, which were fried.

## Select and Use

Many candidates produced good evidence of 'select and 'use'. To satisfy the high category, candidates were required to provide explicit evidence of their ability to 'select' and 'use skilfully', tools, equipment and **processes** whilst manufacturing of their product. Products must be appropriate to meet the demands of KS4 to access the medium to higher mark levels. Candidates producing only KS3 products often had their marks adjusted.

Teacher assessors must mark this criterion more realistically. There were many examples this year of candidates gaining 15 or 18 marks for work that were only at best KS3 skill level. When standard components are used it makes it very difficult for the candidates to access the highest marks. Once again candidates produced Victoria sandwich and then roll out bought icing - this does not demonstrated high skills.

Evidence for 'select and use' is best presented through photographic evidence. Evidence for 'use skilfully' was presented by many candidates in the form of good quality photographs, which showed evidence of the skill and accuracy. A few centres provided detailed teacher annotations.

In order to satisfy the high category, candidates must include in their design folios the kind of explicit evidence already described, and teacher annotation, where offered, must be both detailed and as a support to that already included by the candidate. Some centres produced tables indicating equipment and methods chosen for use, together with the reason for choice and then any particular safety points that needed to be borne in mind, ready for addressing the third key feature in this criterion.

## Make Products

This area was over marked in many centres with teacher examiners clearly awarding marks in this criteria which should have been awarded in 'select and use'.

The marks is this criteria are awarded by looking at the final product and looking back at the final design proposal - if the two match fully and are of KS4 skill level then the higher marks can be awarded. Where a candidate fails to have a final design proposal the higher marks cannot be accessed. The assessment criteria state that candidates must "make a high quality product which relates fully to the features of the design proposal" to achieve the highest band of marks.

## Work Safely

Safety relates to physical safety and well being of the candidate and those around them **not** the bacterial / food poisoning safety aspects. Some centres continue to over mark this key feature. To access the high level mark candidates must detail most of the safety precautions, which relate to **both themselves and others** with respect to specific materials or tools or equipment or processes to be used when making their product. Only a low mark can be awarded for teacher observation alone and if this is to be credited the CMRB must be annotated with sufficient detail by the teacher.

## Criterion 6

Devise and apply tests to check the quality of candidate's work at critical control points. Ensure that candidates' products are of suitable quality for the intended use. Suggest modifications that would improve candidates' performance.

All three key features in this criterion relate to work associated with the completed final product only. Centres are not addressing these features correctly. To access the high level mark candidates need to develop and use appropriate testing techniques to check the product against all aspects of the specification. To do this, candidates need to test their final product against the measurable points of the specification. (The importance of a detailed design proposal / product specification evolving from the criterion 2 cannot be emphasised too strongly.) Area for testing can include sizes, tolerances, fat content, calorie intake for a portion / the whole item. User views (the target market) are an important factor when tests and checks are undertaken. The views of these users are the basis for the evaluation of the final product and must be sought. The product is worthless if it fails to meet the specification laid down for the target market. Some centres once again allocated marks for 'testing and checking' that had been undertaken at the 'ideas' and 'development' stages rather than at the completion of the design process at the end of the portfolio. Marks can only be awarded for testing and checking of the final product. Testing and checking recorded earlier in the portfolio will have been marked already and cannot be credited again. Centres must ensure they do not double credit work.

Many candidates used taste tests as their sole form of testing and checking.

## Evaluate

Evaluations were generally well marked although many candidates continued to evaluate the whole project - which is not required. As with tests and checks some centres had mistakenly credited marks for evaluative comments made in 'Ideas', 'Develop' and 'Review' sections in criterion 2. The assessment criterion states that candidates **must evaluate the final product** using evidence from the test results and considering user views. The evaluations are written from the evidence gained in tests and checks and the views of the intended users. Subjective statements made by the candidate, which are not backed up with evidence can only be awarded the lowest marks. Evaluations must relate to measurable points of the specification. Evaluative comments must be objective and statements should be supported with evidence from tests and checks.

## Modification

The modifications are related to the changes that could be made to the final product from the evidence gained in the tests and checks and the views gained from the intended user. The candidate is not required to comment on how they would organise their time while completing the whole project. This key feature demands that candidates use the results from evaluating the final product to suggest and justify modifications to the product. To access the high level mark candidates need to present more than one modification, each arising from a different evaluation point.

Some centres had credited modifications previously marked in the 'Ideas' and 'Develop' sections.

# GCSE Design & Technology: Food Technology Principal Examiner's Report June 2008 1970, Paper 2F

## **General Comments**

Candidates generally responded well to the paper this year with very few failing to attempt the questions. Most candidates were entered at the correct tier of entry. Centres still need to be aware of the need to prepare candidates for this exam by ensuring that they have a full understanding of the requirements of different question types: name, state, give, describe and explain. Often, candidates had difficulty in achieving the full marks for questions asking for an explanation, because answers were not supported with relevant examples or reasoning. Additionally, for some of the technical questions relating to food products and nutritional understanding candidates gave answers that were incorrect or vague. Centres must focus on technical understanding in order to enable candidates to access the higher marks.

## Foundation Tier (Paper 2F)

The response of candidates to this paper was generally good with most able to provide answers in all sections. Marks were scored evenly across all areas of the paper. Most candidates were entered for the correct tier of entry. More centres should make use of scribes or readers as there were many papers that were illegible as candidates were possibly not English speakers or could not read and/or write. Handwriting was much poorer than usual and many candidates lost marks through carelessness or lack of thought and effort.

## Question 1

This question was well answered by the majority of candidates. Most candidates were able to correctly identify the equipment or tool used for food preparation in the home or school kitchen. The equipment that caused the most difficulty to name was the flour dredger, however, most candidates knew what it was intended to be used for. Candidates are getting better at describing a task for each item. Hand held blenders are clearly well used at centres and candidates were able to correctly give three ways in which they are suitable for elderly people. However, weaker candidates frequently confused safety and speed or missed the point completely by implying that elderly people have no teeth and therefore need pureed food, rather than relating the answer to the weight, ease of use/cleaning of the appliance. Many candidates did not distinguish between instant and tinned soup, referring to heating it quickly/easily/in the microwave. The explanation part of the question was very poorly answered, with few candidates managing to state a point and then provide an explanation. Responses to CAM systems and EPOS data were good.

## Question 2

The first part of this question was poorly answered. Frequently candidates used the stem of the question in their answer, and were unable to achieve a mark for calcium. Most candidates achieved a mark for 'strong' bones and teeth. There was generally little or no understanding of why milk has a short shelf life, with vague references to it being fresh or from an animal. However, different ways of processing milk was

well answered with many candidates achieving full marks. Flavour enhancers were often explained well with references to milk being bland, and needing to make the strawberry flavour stronger. The use of CAM to make food products cheaper was well answered and centres had made good use of meal planning, budgeting and profit margins in their teaching. Factory farming and vegetarianism were topical questions with many good answers and appropriate mentions of the efforts of celebrity chefs.

## Question 3

Many candidates failed to read the question: a hot dessert with a colourful, edible decoration. Some candidates were unfamiliar with ingredients used in hot desserts, with some mentioning jelly, ice cream and very strange fruit combinations: orange and strawberry being the most common. Where cheesecakes were mentioned, it was not clear if they were chilled or baked. Where candidates had read the question carefully and planned their answer methodically, they were rewarded with some good marks. The choice of orchard fruits for fruit and fibre content was good with references to nuts, seeds, wholemeal flour and dried fruit. The best ideas were those which were largely based upon pies, sponges, muffins, layered desserts, crumbles and pastries. The standard of drawings continues to improve and very few candidates failed to think of two design ideas. However, there was some repetition between ideas. Candidates must plan their ideas carefully and use the specification as a checklist, ensuring they covered all the points. Evaluations were variable, with some candidates just repeating the wording on their labels. The best candidates started sections by saying: 'This meets the specification, because I have used...'. There were some good negative evaluations, which explained why the design failed, but offered suggestions for improvement.

## Question 4

Candidates struggled to provide good answers for the specification points, with many repetitions from the stem question. The best answers come from candidates who write in short, simple sentences. Answers relating to the environment were generally good, but those relating to the quality and market points were poor. By contrast, the rest of question 4 was answered well, with most candidates scoring marks in all sections. However, the properties of sponge fingers caused some problems, with candidates getting muddled between properties and reasons. Functionality of ingredients is an important part of product design in coursework and this was an ingredient that was unfamiliar to some candidates. Centres are teaching quality control well and candidates could support their answers with relevant points. Most candidates scored good marks in the final sub section.

# GCSE Design & Technology: Food Technology Principal Examiner's Report June 2008 1970, Paper 2H

## **General Comments**

Candidates generally responded well to the paper this year with very few failing to attempt the questions. Most candidates were entered at the correct tier of entry. Centres still need to be aware of the need to prepare candidates for this exam by ensuring that they have a full understanding of the requirements of different question types: name, state, give, describe and explain. Often, candidates had difficulty in achieving the full marks for questions asking for an explanation, because answers were not supported with relevant examples or reasoning. Additionally, for some of the technical questions relating to food products and nutritional understanding candidates gave answers that were incorrect or vague. Centres must focus on technical understanding, to enable candidates to access the higher marks.

## Higher Tier (Paper 2H)

Response to this paper was very positive with the more able candidates showing a range of knowledge and the ability to use technical language. As with the foundation tier many candidates failed to score full points on describe/explain questions as they do not link one answer to a supporting point. Instead, they give several unrelated points. This is a demanding type of question, worthy of high marks and provides the basis for differentiation. The design question was very well received and candidates produced a wide range of interesting sweet and savoury dips, with well drawn designs.

## Question 1

This is an overlap question between the two tiers.

Candidates answering the higher tier paper generally wrote good answers for the specification points, but there were some repetitions of the stem question. The best answers come from candidates who write in short, simple sentences. Answers relating to the market and environment were generally good, but those relating to quality points were poor. By contrast, the rest of question 1 was answered well, with most candidates scoring marks in all sections. However, the properties of sponge fingers caused some problems, with candidates getting muddled between properties and reasons. Functionality of ingredients is an important part of product design in coursework and this was an ingredient that was clearly unfamiliar to some candidates. Centres are teaching quality control well and most candidates could support their answers with relevant points. Most candidates scored good marks in the final sub section, where they could discuss the importance of five portions of fruit or vegetable a day, with reference to the strawberries and juice content. Clear containers, showing the colours and layers, allowed candidates to achieve high marks for this section.

## Question 2

Excellent answers for the first two sub sections with many candidates achieving full marks. Piping, moulding and use of tins were common answers and most candidates mentioned that cutters could improve quality control by ensuring that they give consistency in size across a batch, because the cutter has a set shape for quality control. The area that caused the greatest difficulty was with the functionality of ingredients for eggs and salt within bread dough. Too many candidates inappropriately discussed aeration and coagulation, when enriching and glazing were correct answers. It was evident that candidates had the background understanding but were unable to apply their knowledge to different food products. The use of computer controlled equipment to produce food products was answered satisfactorily, but some candidates missed the point that it was *disadvantages*, rather than advantages that were wanted from the wording of the question. The questions relating to the use of computers to manage stock control and gather information were well answered, with a wide range of knowledgeable answers from candidates of all abilities.

## **Question 3**

This question was very well answered, with a good range of suitable ideas. The dip was a product that candidates could clearly relate to, through their food practical lessons. They demonstrated a good understanding of ingredients, with clear cross section drawings, detailed annotation and in some cases a tabled checklist ensuring each design was sufficiently different or original, but relevant to the specification. Evaluations were variable, but where candidates offered objective evaluations, with relevant reasoning, full marks could be awarded.

## Question 4

The first parts of this question were well received by most candidates and gave them opportunities to display good subject knowledge. Processing and preservation techniques were understood well, with good explanations and descriptions, supported with relevant examples. However, candidates struggled with the question about protein; many were unable to explain the part essential amino acids play in creating HBV protein and then unable to name a food containing LBV protein. There was good understanding of the cook chill process and many excellent answers for the packaging questions. Candidates often achieved full marks for these topical questions promoting their environmental awareness. The final sub section about modern technologies was variable with weaker candidates rewriting the question in their answer. However there were many candidates who could talk knowledgeably about rancidity, enzymic browning and seasonal foods and changes occurring to flavours during storage.

## GCSE Design & Technology: Food Technology Principal Moderator's Report June 2008 3970, Paper 01 (Short Course Coursework)

## Introduction

The low number of entries for the short course makes it difficult to provide meaningful comments on the performance of the candidates. However, the comments made on the full course common questions or elements are relevant and helpful for the short course and should be read in conjunction with any general comments provided below.

## **General Comments**

Candidates folders were generally well presented, however, several centres once again had not used the Edexcel provided CRMBs for the Short Course and had adapted the Full Course paper work. Centres must ensure that pages are numbered and that the CRMBs are annotated. The Board sends out the correct CRMBs to the school examination officer. A small number of centres awarded marks that were between the marks made available by the Board. Some centres encouraged their candidates to design their own task, which involved preparation work for the candidates prior to beginning their research. Centres should note that there are no marks awarded for this element in the short course hence the reason the Board suggests a range of tasks.

Once again the Edexcel approved Task Sheets proved to be a success, as they tended to give candidates a better focus and helped them structure their folios. Candidates however must ensure that they keep their research relevant to the task they are studying and not include large amounts of nutritional information gained from books that is not focused on their own task. Candidates must also include a final design proposal in order to access the higher marks in both Criteria 2 - Develop, and Criteria 5 - Make Task, where the product that has been produced should fully match the design proposal.

Candidates must also ensure that they produce an outcome, which is of Key Stage 4 skill level. Simple tasks will few skills cannot gain the higher marks.

The detailed comments included in the Full Course report are pertinent to the Short Course too and it is recommended that the Full Course report be read in conjunction with these brief statements.

# GCSE Design & Technology: Food Technology Principal Examiner's Report June 2008 3970, Paper 2F (Short Course)

## Introduction

The low number of entries for the short course makes it difficult to provide comments on the performance of the candidates. However, the comments made on the full course common questions or elements are relevant and helpful for the short course and should be read in conjunction with any general comments below.

Centres still have a tendency to enter far too many candidates for the higher tier. This often disadvantages the candidates as they would perform better on the foundation tier. As with the full course centres need to spend time on exam technique, raising awareness of how to tackle questions that ask for descriptions or explanations so that their candidates score full marks more often. It is evident that many centres fail to teach their candidates the contents of the specification, relying on knowledge gained from undertaking the coursework. This seriously disadvantages them in the written paper and weaknesses in knowledge of technical terms and food preparation methods are even more obvious than in the full course.

However, there were many candidates who produced some excellent responses for the exam paper, particularly for the higher tier. Responses displayed academic rigour with good application of knowledge, sound nutritional understanding and correct use of technical terminology.

## Question 1

This question was well answered by the majority of candidates. Most candidates were able to correctly identify the equipment or tool used for food preparation in the home or school kitchen. Candidates are getting better at describing a task for each item. Hand held blenders are clearly well used at centres and candidates were able to correctly give three ways in which they are suitable for elderly people. However, weaker candidates frequently confused safety and speed or missed the point completely by implying that elderly people have no teeth and therefore need pureed food, rather than relating the answer to the weight, ease of use/cleaning of the appliance. Many candidates did not distinguish between instant and tinned soup, referring to heating it through quickly/easily/in the microwave. The explanation part of the question was very poorly answered, with few candidates managing to state a point and then provide an explanation.

## **Question 2**

The first part of this question was poorly answered. Frequently candidates used the stem of the question in their answer and were unable to achieve a mark for calcium. Most candidates achieved a mark for 'strong' bones and teeth. There was generally little or no understanding of why milk has a short shelf life, with vague references to it being fresh or from an animal. However, different ways of processing milk was well answered with many candidates achieving full marks. Flavour enhancers were often explained well with references to milk being bland, and needing to make the strawberry flavour stronger.

## Question 3

Candidates struggled to provide good answers for the specification points with many repetitions from the stem question. The best answers come from candidates who write in short, simple sentences. Answers relating to the environment were generally good, but quality and market points were poor. By contrast, the rest of the question was answered well, with most candidates scoring marks in all sections. However, the properties of sponge fingers caused some problems, with candidates getting muddled between properties and reasons. Functionality of ingredients is an important part of product design in coursework and this was an ingredient that was unfamiliar to some candidates. Centres are teaching quality control well and most candidates could support their answers with relevant points. Most candidates scored good marks in the final sub section.

# GCSE Design & Technology: Food Technology Principal Examiner's Report June 2008 3970, Paper 2H (Short Course)

## Introduction

The low number of entries for the short course makes it difficult to provide comments on the performance of the candidates. However, the comments made on the full course common questions or elements are relevant and helpful for the short course and should be read in conjunction with any general comments below.

Centres still have a tendency to enter far too many candidates for the higher tier. This often disadvantages the candidates as they would perform better on the foundation tier. As with the full course centres need to spend time on exam technique, raising awareness of how to tackle questions that ask for descriptions or explanations so that their candidates score full marks more often. It is evident that many centres fail to teach their candidates the contents of the specification, relying on knowledge gained from undertaking the coursework. This seriously disadvantages them in the written paper and weaknesses in knowledge of technical terms and food preparation methods are even more obvious than in the full course.

However, there were many candidates who produced some excellent responses for the exam paper, particularly for the higher tier. Responses displayed academic rigour with good application of knowledge, sound nutritional understanding and correct use of technical terminology.

## Question 1

Candidates answering the higher tier paper generally wrote good answers for the specification points, but, there were some repetitions from the stem question. The best answers come from candidates who write in short sentences. Answers relating to the market and environment were generally good, but those relating to quality points were poor. By contrast, the rest of the question was answered well, with most candidates scoring marks in all sections. However, the properties of sponge fingers caused some problems, with candidates getting muddled between properties and reasons. Functionality of ingredients is an important part of product design in coursework and this was an ingredient that was clearly unfamiliar to some candidates. Centres are teaching quality control well and most candidates could support their answers with relevant points. Most candidates scored good marks in the final sub section, where they could discuss the importance of five portions of fruit or vegetable a day, with reference to the strawberries and juice content. Clear containers, showing the colours and layers, allowed candidates to achieve high marks for this section.

## Question 2

Excellent answers for the first two sub sections with many candidates achieving full marks. Piping, moulding and use of tins were common answers and most candidates mentioned that cutters could improve quality control by ensuring that they give consistency in size across a batch, because the cutter has a set shape for quality control. The area that caused the greatest difficulty was with the functionality of ingredients for eggs and salt within bread dough. Too many candidates

inappropriately discussed aeration and coagulation, when enriching and glazing were correct answers. It was evident that candidates had the background understanding but were unable to apply their knowledge to different food products.

## Question 3

The first parts of this question were well received by most candidates and gave them opportunities to display good subject knowledge. Processing and preservation techniques were understood well with good explanations and descriptions, supported with relevant examples. However, candidates struggled with the question about protein; many were unable to explain the part essential amino acids play in creating HBV protein and then unable to name a food containing LBV protein.

# GCSE Design & Technology: Food Technology (Full Course: 1970)

## Grade Boundaries - Summer 2008

## **Overall Grades**

The figures given below are the minimum subject marks required for each overall grade in the summer 2008 examinations.

(Foundation Tier out of 100)

С	D	E	F	G
53	43	34	25	16

(Higher Tier out of 100)

A*	А	В	С	D	E
79	70	61	52	41	35

#### **Component Marks**

The figures given below are the minimum marks required for each component grade in the summer 2008 examination.

(Coursework 01 out of 102)

A*	А	В	С	D	E	F	G
92	80	68	56	45	34	23	12

(Paper 2F out of 88)

С	D	E	F	G
47	39	32	25	18

(Paper 2H out of 88)

A*	А	В	С	D	E
57	52	46	41	32	27

# GCSE Design & Technology: Food Technology (Short Course: 3970)

Grade Boundaries - Summer 2008

## **Overall Grades**

The figures given below are the minimum subject marks required for each overall grade in the summer 2008 examinations.

(Foundation Tier out of 100)

С	D	E	F	G
50	40	31	22	13

(Higher Tier out of 100)

A*	А	В	С	D	E
71	63	55	48	37	31

## Component Marks

The figures given below are the minimum marks required for each component grade in the summer 2008 examination.

(Coursework 01 out of 84)

A*	А	В	С	D	E	F
76	66	56	46	37	28	19

(Paper 2F out of 44)

С	D	E	F	G
20	16	12	9	6

(Paper 2H out of 44)

A*	А	В	С	D	E
25	22	19	17	12	9

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