

Design and Technology: Food Technology

General Certificate of Secondary Education **J302**

General Certificate of Secondary Education (Short Course) **J042**

Examiners' Reports

January 2011

J302/J042/R/11J

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This report on the Examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the specification content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the Examination.

OCR will not enter into any discussion or correspondence in connection with this report.

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Chief Examiner's Report

This report provides an overview of the work seen in the written examination Units 2 and 4 and the Controlled Assessment Units 1 and 3, for candidates who took the examination during this series. It precedes a more detailed report to centres from each subject area within the Innovator Suite and highlights general issues that have occurred across the suite of specifications.

This report has been prepared by the Chief Examiner, Assistant Chief Examiners, Principal Examiners and Principal Moderators and covers all specifications within the Innovator Suite. It should be read in conjunction with the examination papers, the mark schemes, and the marking criteria for assessment given in the specification booklets.

This is the first examination series in the second year for the new Innovator Suite.

A reminder: An important point for teachers to note about the Terminal Rule in relation to this suite of specifications and re-sits:

The terminal rule is a QCDA requirement. Candidates must be entered for at least two units out of the four (full course) at the time that they certificate. ie the end of the course.

Please be aware that the QCDA rule states that marks scored for terminal units will be the marks used in the calculation of candidate grades. Therefore, if one of the candidate's terminal units is a re-sit and the mark is poorer than the original mark, the poorer mark will be used to calculate the final grade for that candidate.

Obviously, the terminal unit marks are then added to the highest marks scored in the other units making up the certificate. Centres are reminded that it is also a requirement of QCDA that candidates are now credited for their accurate use of spelling, punctuation and grammar across all four units.

It is pleasing to see that Centres and candidates have continued to respond well to the new style of examination approach. Centres are to be commended for this.

Written Examination – Units 2 and 4

Unit 2 – For this examination series of the GCSE Innovator suite entries were seen from all six subject specialisms:

A512 Electronics and Systems Control
A522 Food Technology
A532 Graphics
A542 Industrial Technology
A562 Resistant Materials
A572 Textile Technology

Entries were significantly increased this session giving a more realistic idea of candidate performance. The overall performance and range of results for Unit 2 has improved. Performance however, within subject specialisms is still varied.

Many of the candidates demonstrated a general awareness of the main points and issues linked to sustainable design and the 6Rs.

In **Unit 2 – Section A** Most candidates across the suite attempted to answer all questions, with few candidates giving no response (NR) answers. It was noticeable that, at times, candidates had not read the instructions correctly and centres would benefit from explaining the correct examination requirements to the candidates. Candidates need to be encouraged to give an answer for the multiple choice style questions even if they are uncertain that they are correct. There was less duplication of circling answers seen during this examination session.

Unit 2 – Section B A greater mixture of responses was seen and teachers need to ensure they read the subject specific reports for further detailed feedback on specific issues and individual question performance.

In general, candidates lacked the specific knowledge and understanding required to answer some questions in depth. Many candidates did manage to use subject specific 'terms' in their answers, but at times these lacked sufficient depth and tended to be generally weak.

Candidates need to be made aware of the importance of the wording of each question and they need to understand the difference between terms like 'name', 'discuss' and 'explain'. Many candidates did not score marks on the explain questions, because they gave a list of unrelated points instead of developing one of these.

Important: Candidates need to be careful that they do not repeat the question in their answer or write the same answer for several questions. Such answers included:

- 'Environmentally friendly' and 'better for the environment' or 'damages the environment'.
- To 'recycle' and 'recycling' is good for the environment.

The questions marked with an asterisk * provided candidates with an opportunity to give a detailed written answer combining good subject knowledge with an ability to produce a structured response. Few candidates were able to do this really well, but most candidates did score two or more marks from the six available for this question.

Hand writing at times was difficult to decipher and candidates need to be prepared to make an effort with their hand writing, particularly on the banded mark question * and questions requiring a detailed explanation or discussion of points.

Centres are reminded that candidates are marked on spelling, punctuation and grammar on the banded mark scheme question. It is also important to note that candidates need to ensure that they write legibly and within the areas set out on the papers.

Unit 4 – For this examination series of the Innovator suite entries were seen from the following subject specialisms:

A514 Electronics and Systems Control
A524 Food Technology
A534 Graphics
A544 Industrial Technology
A564 Resistant Materials
A574 Textile Technology

The overall performance of candidates varied considerably across the suite of subjects for Unit 4. However, it was encouraging to find that many candidates did demonstrate a good understanding of the technical aspects of designing and making in most of the specification areas this series compared to last year.

Areas of Unit 4 which Principal Examiners highlighted as being of particular concern are:

- **Reading questions carefully** – the majority of candidates attempted all the questions this series. It is important that candidates do read the questions carefully to determine exactly what is required. It can be helpful for candidates to highlight what they consider to be the 'key' words or instructions before completing their answer.
- **Clear and accurate answers** – in questions that require candidates to produce sketches and notes, it is essential that answers are made as clear and technically accurate as possible. Marks may be compromised through illegible handwriting and poor quality sketches.

It is apparent this series that candidates need to be practiced in examination technique; reading the questions carefully, responding to the instructions given in the questions and having an awareness of the full range of question formats.

Centres are to be reminded that questions marked with an asterisk* provide candidates with the opportunity to give detailed written answers combining good subject knowledge with an ability to produce structured, coherent responses and accurate spelling. A list of bullet points does not represent an adequate answer. Practice of this type of question which carries [6] marks is strongly recommended. There are two of these type of questions within Unit 4.

Controlled Assessment – Units 1 and 3

Unit 1 – For this examination series of the Innovator suite entries were seen from the following subject specialisms:

A511 Electronics and Systems Control
A521 Food Technology
A531 Graphics
A541 Industrial Technology
A561 Resistant Materials
A571 Textile Technology

Unit 3 – For this examination series of the Innovator suite entries were seen from the following subject specialisms:

A524 Food Technology
A533 Graphics
A563 Resistant Materials
A573 Textile Technology

This examination series has seen portfolios for all subject specialisms being submitted both through postal and repository pathways. Most Centres have been prompt in the dispatch of documentation to OCR and moderators, which is to be commended. It is important that Centres forward form CCS160 in particular to moderators.

Important Note: Centres must ensure that if candidates are entered through the repository (01), the marks must be downloaded onto the OCR site and **NOT** sent through to the moderator on a disc. This is classed as being a postal (02) moderation.

In general, Centres have been successful in applying the marking criteria for both Units 1 and 3. However, it is still noticeable that some candidates were being awarded full marks for work that lacked rigour and depth of analysis. Words highlighted on the marking criteria grids such as 'appropriate', 'fully evaluated', 'detailed' and 'critical', which appear in the top mark band, were not always adhered to.

Centres are reminded to apply the mark scheme on a 'best fit' basis. For each of the marking criteria, one of the descriptors provided in the marking grid that most closely describes the quality of the work being marked, should be selected. Marks should be positive, rewarding achievement rather than penalising failure or omissions.

It was still evident that a significant number of portfolios, particularly for Unit 1, resembled the legacy format. Care must be taken here to ensure that the marking criteria and format of the Innovator suite is not confused with the legacy approach.

It is important that Centres encourage candidates to organise the portfolio according to the different marking criteria strands as it enables the candidates to produce work that clearly shows an understanding of the controlled assessment requirements. Portfolios should be clearly labelled with the Candidate and Centre name and number, with the unit code and title also evident. (Specification – 5.3.5 Presentation of work) This is particularly important when the Centre submits work via the OCR Repository, where individual files are used to store portfolio work. Centres need to ensure that candidates clearly label each file using the marking criteria section headings; this facilitates a more effective completion of the moderation process. Centres are also reminded to ensure that the OCR cover sheet is evident on each portfolio of work, **outlining the theme and the starting point** chosen by the candidate.

Many candidates included a bibliography or referenced their research sources, which was pleasing to see. It is good practice to ensure that candidates acknowledge sources of information used for the development of their portfolio work.

There was still some evidence this series of strong teacher guidance influencing candidate portfolios. Where this was evident it greatly hampered the candidate's ability to show flair and creativity, and therefore achieve the higher marks. Centres should avoid over-reliance on writing frames for candidates work.

Centres are to be reminded that the 'controlled assessment task must NOT be used as practice material and then as the actual live assessment material. Centres should devise their own practice material using the OCR specimen controlled assessment task as guidance.' Specification – Section 5.2.2 Using Controlled Assessment Tasks.

It was noticeable that where candidates had scored the high marks, they had used specialist terms appropriately and correctly and had presented their portfolio using a structured format. Centres are to be commended on the amount of work produced for the portfolios in Units 1 and 3, which has been realistic in terms of the amount produced and the time allocated to each unit – 20 hours.

Unit 1 – specific areas of importance

Centres are to be reminded that Themes for Unit 1 are based around environmental awareness and sustainable resources/processes. Therefore, it is considered good practice for teachers to encourage candidates to consider Eco-design and sustainability when making decisions and combining skills with knowledge and understanding, in order to design and make a prototype product. This knowledge base also acts as a 'spring board' to active learning for Unit 2.

It was evident through the portfolio that candidates struggled with the critical evaluation section of the marking criteria. Unit 1 requires that the candidate evaluates the processes and subsequent modifications involved, in the designing and making of the final prototype ONLY. Too many references were made to the performance of the prototype against the specification, which meant that candidates' marks were compromised. (Not applicable to Food Technology.)

Unit 3 – specific areas of importance

Due to the low number of entries for this unit specific guidance is limited. However, centres need to ensure that candidates complete a quality product for Unit 3. The weighting of marks available for the making section therefore, must be reflected in the time available for the candidates to complete a quality product.

A521 Introduction to designing and making

General Comments

Candidates should be encouraged to organise their portfolio into separate sections according to the assessment criteria and show appropriate use of ICT. Some candidates did not divide their work into sections. Portfolios should be labelled clearly with both the candidates name and number.

There was an improvement in the standard of portfolios submitted for moderation this year but some Centre's marks still required adjustments because the levels of response in the Assessment Objectives had been interpreted too leniently.

Too often the higher attaining candidates were awarded top marks, when in fact the work didn't really show great capability and depth of involvement. Words such as 'appropriate', 'fully evaluated', 'detailed' and 'critical' which appear in the top mark band, were not really adhered to.

There was lack of written evidence in some candidates' folders of the adaptations/modifications to the recipes being trialled during Designing. Clearly, this is not within the philosophy of Design and Technology – Food Technology. Candidates should be encouraged to use their own ideas creatively throughout the whole design and make process.

Work which is annotated by the teacher clearly helps the moderation process. Some Centres had done this particularly well. There should be photographic evidence of the practical work along with written teacher comments. This is particularly important for the low attaining candidates where there is little written evidence in their portfolio. **A separate cover sheet containing reference to the assessment criteria applied is required by OCR.**

The use of writing frames and pre-printed sheets should be used with caution. It is important that high achieving candidates are given the opportunity to show flair and creativity in approaching the assessment criteria.

Assessment Criteria

The level of response is an important part of the mark scheme and should be carefully considered when assessing candidates work. The levels should equate to the quality of the evidence, the capability and depth of involvement that has been employed to produce what is on offer. Within an Assessment Criteria the quality of evidence to fulfil a particular level of response at a lower level must be very different from the evidence that might fulfil a similar level of response at a higher level. The capability and depth of involvement must be evident to gain the marks at the higher level.

It is very important that the portfolio starts with the chosen Theme/Product and a starting point. All the work produced should relate to this chosen theme and starting point. Moderation is difficult if the focus of the portfolio is not clear. Candidates should also develop a new product that meets an identified aspect of current healthy eating guidelines.

Cultural Understanding

- Candidates had collected and presented information on how changes in society, including cultural issues have influenced the products available today but many are still not relating the information to their chosen theme/product.
- Portfolios included information on how wise choice of food products can promote healthy lifestyles, though sometimes this section was not concise.

- Some candidates completed mind maps to highlight issues but then gave no explanation or meaningful conclusions/reflections on them.
- A number of Centres were over generous when marking this section because of lack of independent analysis.
- Some candidates did not acknowledge sources of information.

A high level of response to this section would include:

- Chosen product/theme and starting point clearly stated at the start of the portfolio.
- Considering how changes in society, including cultural issues have influenced the range of food products available today in relation to their chosen product/theme.
- Evidence of how wise choice of food products can promote healthy lifestyles.
- Information being presented concisely and the sources acknowledged.

Creativity

- Most candidates used a questionnaire to identify the needs of the user/target group/a nutritional focus but in some cases questions were irrelevant, graphs were not analysed and/or the Design Brief did not arise from the findings of research. Centres credited candidates with full marks when there was little supportive evidence for the choice of the design brief and when a precise design brief had not been given. The Design Brief must include 1 nutritional focus. Many candidates did not justify their choice of target group and/or nutritional focus. Some candidates chose more than 1 nutritional focus resulting in the application of the nutritional data becoming more difficult later on in the portfolio. Centres should not set the target group and/or nutritional focus. Some candidates presented their design brief as a long and wordy "mini-specification". Candidates need to be encouraged to present a clear and concise design brief which allows the opportunity to demonstrate a wide range of practical skills.
- Questionnaires that lacked focus did not allow candidates to identify the qualities respondents require from a new product which resulted in existing products not being evaluated against identified needs and the design brief and the design specification at the beginning of the Designing Section not being developed from analysis of research. A number of Centres credited candidates with high marks when analysis of the questionnaire results was very superficial.
- Once again the standard seen in the evaluation of existing products varied tremendously. Some candidates did not use their identified needs, others used pro formas with the same identified needs throughout the Centre, whilst others, clearly understood what they were doing and used their own identified needs.
- In some cases products were evaluated in the form of a table with no conclusions drawn from the results. Detailed evaluation of 1 product was seen by some Moderators but a number commented that evaluation of the chosen product tended to be very limited and superficial or tended to be a description of the product rather than an evaluation. Many chose inappropriate products to evaluate that didn't match their task. Evaluation of packaging is not required.
- Many candidates had used one method of research to identify and record relevant data to help design a creative innovative product. However, the data was not always presented concisely.

A high level of response to this section would include:

- Carrying out research eg questionnaires/interviews/available statistical data to identify the qualities required for the design of a creative, innovative food product/target group/a nutritional focus that the portfolio will focus on;
- Providing a detailed analysis of the results in order to identify the needs of the user/target group/nutritional focus which then leads to a clear and precise design brief;

- A design brief that includes 1 nutritional focus.

Example of a concise and precise design brief: Design and make a lower in fat ready meal aimed at families.

- Critically evaluating existing products against the needs of the intended user(s) – 4 products in chart form with a conclusion and 1 product in detail;
- Relevant data which is edited and presented concisely. All sources of information should be acknowledged.

Weaker candidates tended to make very little reference to results of research resulting in rather vague briefs and superficial evaluation of existing products. This would be regarded as a low level of response.

Designing

- The quality of design specifications varied widely. Some candidates produced very detailed design specifications, other design specifications were far too brief and in some cases, they tended to be teacher led. There was evidence of the design specification not reflecting the findings from research in the Creativity Section of the portfolio.
- The use of proforma sheets for the planning and evaluating of products limited candidates' creativity and initiative and tended to result in repetitive responses.
- Some candidates chose products that showed little or no skills or only allowed them to show the same skills.
- Most candidates chose 4 products to trial but too many failed to adapt or modify original recipes to be creative, innovative, fit their design specification and design brief, and to record and explain the proposed changes.
- Some candidates failed to list the skills required for the making of each product.
- Detailed annotated diagrams, equipment lists, methods, time plans or flowcharts are not required for this section. However, candidates are required to list the practical skills they will use for each product.
- Some candidates had trialled and tested a wide range of interesting solutions. There was good evidence of star diagrams/profiles and rating charts but marks were lost if these results were not always explained or conclusions drawn.
- Detailed evaluations of ideas against the specification was again a weak area in this section for many candidates. Evaluations were often cursory with only a ticked chart and this cannot be considered a detailed evaluation. Some candidates had evaluated each solution but then failed to make any reference to the specification. Other candidates had evaluated the making of the products rather than the product itself. Some candidates failed to suggest any improvements to the product.
- Nutritional analysis of the trialled products according to the candidates chosen nutritional focus was disappointing. A significant number of candidates failed to refer to their nutritional focus using available data, when evaluating their trialled products. Some candidates discussed more than one nutritional focus which is not required. Other candidates did not show any reference to a nutritional focus, a requirement of Unit 521.
- Reasoned decisions with reference to ingredients and equipment for the final product (prototype) in many centres was well done but some candidates failed to apply relevant nutritional data according to their nutritional focus when giving reasoned decisions.

Marks for the application and understanding of nutritional knowledge according to the chosen nutritional focus are awarded to the Making Section.

A high level response to this section would involve:

- A detailed design specification reflecting research findings from the Creativity section of the portfolio.
- Proposing a wide range of appropriate solutions – listing a range of ideas before choosing 4 ideas to trial, with detailed evaluation against the specification, design brief and chosen nutritional focus.
- For each product to be trialled – listing ingredients and practical skills, adaptations clearly explained and justified to produce creative and innovative ideas, nutritional analysis according to the chosen nutritional focus, evidence of testing by 3 tasters, detailed evaluation against the specification, design brief and nutritional focus using results from testers as evidence, discussion of improvements taking into account users views.
- Using a wide range of appropriate techniques to present solutions.
- Giving reasoned decisions for ingredients, equipment for the final product (prototype), applying relevant nutritional knowledge and understanding.

Making

- Some candidates produced products that demonstrated a wide range of skills, but it was noticeable that many Centres are crediting candidates with high marks without evidence of this range of skills.
- The use of digital cameras allowed candidates to include photographs of their work. Centres are reminded that the minimum requirement is a photograph of the final product.
- Nutritional analysis according to the chosen nutritional focus should be evident along with a flowchart for the making of the final prototype (product).
- To achieve high marks for practical work candidates need to select and use appropriate ingredients and equipment, work safely, hygienically, skilfully to prepare, shape, form, mix, assemble (wide range of skills) and produce high quality, creative and innovative outcomes.

A high level response to this section would be:

- Producing a detailed flowchart which clearly shows all process required for the making of the final product (prototype).
- Showing thorough understanding and application of the chosen nutritional focus throughout the portfolio.
- Being resourceful and adaptable with materials, foods and equipment.
- Selecting and using appropriate ingredients and equipment.
- Working safely, hygienically, skilfully to prepare, shape, form, mix, assemble (wide range of skills).
- Produce high quality, creative and innovative outcomes.

Evaluation

- Some candidates provided evidence of testing of the final product (prototype) but conclusions, were often superficial and unsupported, resulting in the evaluations being descriptive rather than evaluative.
- Comments when evaluating against the design specification often lacked specific detail, stating the product had met the specification without any justification.
- Some Centres did not give credit for spelling punctuation and grammar.

A high level of response to this section would be:

- Critically evaluating their product against the design specification and design brief using results of testing (5 testers) to give meaningful conclusions.
- Suggesting possible improvements.

- Using specialist terms appropriately and correctly, presenting information in a structured format and accurate use of spelling, punctuation and grammar.

GOOD PRACTICE WITHIN ADMINISTRATION OF THE CONTROLLED ASSESSMENT

- 1 Work should be removed from ring binders, presented so that pages can be turned without having to remove sheets from plastic wallets and securely fastened together eg by means of a tag, then clearly labelled with Centre Number, Name and Candidate Number. Mark sheet/annotation sheet should be attached to each piece of work.
- 2 The Controlled Assessment Mark Sheet(s) should be sent to the Moderator with the MS1. Centres need to make sure that this paperwork arrives to the Moderator by the date specified by OCR and portfolios should be sent within 3 days of receipt of the request for the sample.
- 3 Encourage the candidates to divide their work under headings for the separate Assessment Criteria.
- 4 Where more than one teacher is involved in the assessing of candidates work, the centre should carry out effective internal standardisation to ensure a reliable rank order.

A522 Sustainable design

General Comments

The overall performance and range of results was much better. Candidates generally performed better on the short questions in Section A than in the longer questions of Section B, which required detailed answers. More candidates were able to access the higher marks. However there is still some evidence that the candidates are entered for the examination when they have not covered the whole of the A522 specification.

There were a fewer number of 'no response' answers – this occurred mostly on question 16(c)(i) and 17(b). It was particularly disappointing to see candidates not attempting some of the questions in Section A. Some candidates also ringed more than one answer and therefore did not score any marks.

Many candidates demonstrated a general awareness of the main points and issues linked to sustainable design however they lacked the specific knowledge and understanding required to answer questions in depth. Questions that tested an understanding of Fairtrade and sustainability issues were generally answered more satisfactorily than those requiring nutritional knowledge.

In Section B, many candidates lost marks through poor examination technique. A considerable number of students wasted time and space re-writing the question before they began their answer. Many also presented answers to the 'explain' and 'discuss' type of questions as a haphazard collection of facts, not necessarily related to the question. There was little evidence of candidates structuring their answers to develop the points that they made, or reading through the script to check their answers at the end. Words were occasionally omitted which changed the sense of the whole answer and meant that marks could not be awarded.

Candidates need to be made aware of the importance of the wording of each question and they need to understand the difference between terms like 'name', 'explain' and 'discuss'. When questions ask the candidates to explain eg question 18(b) candidates will not score four marks for four separate points. They need to explain two points in detail. They also need to consider carefully who the question is asking about eg in question 18(c) candidates were asked to write from the farmer's point of view, many candidates either wrote from the consumer's point of view or simply described what was meant by organic farming.

The vocabulary of the candidates was better than in the June 2010. However there are still many occasions where candidates fail to use specialist terms eg question 10 where the majority of candidates referred to the loss of nutrients or vitamins, rather than the loss of vitamin C or water soluble vitamins.

Many students were also let down by their poor standard of English and incorrect use of terms. Spelling of key words, such as ingredients, nutrients, and vitamins was poor and vague terms were often used that did not convey sufficient understanding to warrant marks. Vague terms used in answers included: healthy, healthier, heart attack, heart problems, help the environment, pollution, climate change, harmful gases, environmentally friendly, cheaper.

Comments on individual questions

Question 1

The majority of students answered this correctly.

Question 2

Most students knew the correct temperature.

Question 3

There was a mixed response to this question.

Question 4

The majority of candidates knew that rice should only be reheated once.

Question 5

The majority of candidates answered this correctly and knew that too much saturated fat in the diet could cause heart disease.

Question 6

There was a variable response to this question. Many candidates answered this correctly; however there were a significant number of 'no responses'.

Question 7

The most common correct responses were warmth and moisture. Again there were a few candidates who did not attempt to answer this question.

Question 8

Many candidates had been taught what composting is and were able to express this clearly. The majority of candidates referred to the breaking down of foods more detailed responses also added that this made compost/fertilizer. Not many candidates referred to primary or physical recycling. There were some centres where this has not been taught.

Question 9

Many candidates understood what was meant by biodegradable packaging.

Question 10

This question was poorly answered. When candidates referred to the nutrient/vitamin loss they needed to be specific and refer to vitamin C or water soluble vitamins.

Some candidates scored marks as they referred to the increase in energy needed to cook vegetables.

There were a small number of candidates who did not attempt to answer this question.

Question 11

The majority of candidates knew that drying is a method of preservation.

Question 12

The majority of candidates answered this question correctly.

Question 13

The majority of candidates answered this question correctly.

Question 14

The majority of candidates answered this question correctly.

Question 15

There was a mixed response to this question. Some students did not know that the microwave would cook a baked potato quicker than an oven.

Question 16

- (a) The most able candidates changed the cheese to another type of cheese eg Red Leicester, Lancashire, they then were able to gain a further mark by saying using British/local onion. A few candidates added other vegetables and referred to where they were sourced eg carrots from Lincolnshire. Many candidates said use British cheese and then British onions and therefore only scored one mark. Some candidates did not read/understand the stem of the question which referred to the test kitchen, therefore growing the vegetables in their own garden was not a relevant response. There were a few candidates who only gave one change and small majority of candidates did not make a response to the question.
- (b) Many candidates scored one mark with reference to the material being suitable for recycling. Some candidates gave a second explanation of compostable and therefore only scored one mark. Some candidates referred to safety issues this was not part of the question.
- (c)
 - (i) This was the A* question and very few candidates answered this correctly.
 - (ii) Many candidates were able to access this mark and commonly referred to the management of forests and the replanting of trees.
- (d) There were many correct answers however there were a large number of candidates who thought pasta and onions were **high** in protein.
- (e) There were many correct answers for the functions of protein in the diet. Common incorrect answers referred to the strong bones and teeth. In some cases candidates put two foods which contained protein for the answer.
- (f) Surprisingly few candidates achieved high marks for this question. Most showed an awareness of reducing fat and increasing fibre in the diet but other nutritional advice was less well known. A number of candidates lost marks through use of incorrect terms eg 'low fat cheese' and 'low fat butter'. Candidates should be made aware that the term 'low fat' has a specific meaning and that 'low fat butter' and 'low fat cheese' does not exist. A number of candidates also lost marks for suggesting brown pasta instead of wholemeal pasta, or repeating 'low fat' for the nutritional advice throughout their answer.

Question 17

- (a) Most candidates scored at least one mark. However it was disappointing that many candidates could not name three pieces of information that were required by law. A number of candidates thought that nutritional information, bar codes and product codes are legal requirements.

- (b) Only a very few candidates answered this question correctly. Many candidates did not respond to the question.
- (c) Many candidates scored two marks and were able to make correct statements. The majority of these were linked to products being grown in Britain or carbon footprint. It was the more able candidates who were able to go on and expand and give an explanation for what they were saying. An example of this was; 'The British flag showed that the product was grown in the UK; buying this means you are supporting the local farmers.' Some candidates wrote two statements which were opposites and therefore only scored 1 mark, eg 'products from the UK have smaller carbon emissions, products brought in by plane have a higher carbon emissions' However, some candidates thought that both labels were on the same packaging, so struggled to suggest an explanation worth 4 marks.
- (d) This was the banded response question. This was not answered very well. Many candidates repeated a lot of the stem of the question in their answer. When discussing points they focused on looking at the nutritional content for specific diets and gave details of nutrients required for specific diets. Some candidates confused nutritional labelling with allergy advice and wrote extensively about this. The more able candidates referred to comparing products, the use of the traffic light system of labelling and guideline daily amount labelling.

Question 18

- (a) The majority of candidates scored at least one mark with many scoring full marks. The most common responses given were bananas, chocolate and coffee.
- (b) Most candidates understood that Fairtrade producers get a fair price for their products and therefore nearly all candidates scored at least one mark. Many were able to go on and give another point. For candidates to get the four marks they needed to develop each of their points. Not all candidates were able to do this. Some candidates gave four separate points and therefore only scored two marks.
- (c) Many candidates repeated their explanation of what is meant by Fairtrade food products. They did not address why people chose to purchase them. The candidates who scored highly on this question often referred to ethical and moral reasons and the quality of products.
- (d) Many candidates described what was meant by organic farming rather than explaining why farmers choose to produce organic food. The most common correct answers referred to consumer demand, premium prices obtained for these products, the improved flavour of foods and environmental considerations.
- (e) Most candidates scored at least one mark usually making reference to the increased cost. Many candidates scored full marks.

A523 Making quality products

General Comments

Candidates should be encouraged to organise their portfolio into separate sections according to the assessment criteria and show appropriate use of ICT. Portfolios should be labelled clearly with both the candidates name and number.

Assessment Criteria

Work which is annotated by the teacher clearly helps the moderation process. There should be photographic evidence of the practical work along with written teacher comments. **A separate cover sheet containing reference to the assessment criteria applied is required by OCR.**

The use of writing frames and pre-printed sheets should be used with caution. It is important that high achieving candidates are given the opportunity to show flair and creativity in approaching the assessment criteria.

The portfolio should start with the chosen Theme/Product and all the work produced should relate to this chosen theme.

Designing

The design brief should be clear and concise.

The chosen theme and design brief should be analysed carefully so candidates can arrive at an appropriate design specification for a creative and innovative product which includes a target group.

The design specification should be structured to allow candidates to demonstrate a wide range of practical skills.

A range of possible, appropriate products should be listed before choosing 4 ideas to trial that allow candidates to demonstrate a wide range of practical skills.

Candidates are required to include forward planning at the start of the Designing Section eg week by week plan – marks awarded to Making.

For each product to be trialled candidates should: -

List ingredients.

Clearly explain adaptations – products should be creative and innovative.

If nutrition forms part of the design brief and/or design specification candidates are required to carry out nutritional analysis during the trialling of their products and refer to the results during evaluation.

Make each product and provide photographic evidence – marks awarded to the making section of the assessment criteria. The photographs required by OCR are to be the candidate's practical products. Other photographs should be acknowledged or not included.

Practical ideas must be creative and innovative if high marks are awarded.

Show evidence of testing by three tasters.

Evaluate against each point in the specification using results from testers as evidence.

Discuss any improvements taking into account testers views.

Candidates are required to choose one of the trialled products for product development and clearly explain why the chosen product is being taken forward and why other ideas have been rejected.

Making

One product should be taken forward to product development.

Candidates are required to carry out 2 modifications before deciding on their final product. The first modification should show reference to the comments made when the product was originally trialled. All further modifications should be justified, reflecting comments made by testers from the previous modification so the product is being developed according to user(s) views. Each modification should be evaluated in detail.

Practical ideas must be creative and innovative.

During product development candidates should: -

List and cost ingredients giving reasons for the changes being made showing consideration to the comments given when the product was originally trialled and the comments made by testers during development work.

Show evidence of testing by 5 tasters.

Carry out nutritional analysis if this is relevant to the brief/design specification.

For the final product there should be evidence of ; -

Reasoned decisions for the choice of the ingredients and equipment.

Costing of the ingredients.

Nutritional analysis if this forms part of the brief and/or design specification.

A product specification which should arise from the design specification and conclusions reached from development work including a labelled sketch/drawing of the final product.

A plan for the making of the final product eg flowchart.

To achieve high marks for practical work candidates need to select and use appropriate ingredients and equipment, work safely, hygienically, skilfully to prepare, shape, form, mix, assemble (wide range of skills) and produce high quality, creative and innovative outcomes.

Evaluation

There should be evidence of testing by 5 tasters. A high level response requires candidates to critically evaluate the final prototype (product) against the product specification and design brief using results of testing to give meaningful conclusions, leading to suggestions for possible improvements. Specialist terms should be used appropriately and correctly, information should be presented in a structured format and there should be accurate use of spelling, punctuation and grammar.

GOOD PRACTICE WITHIN ADMINISTRATION OF THE CONTROLLED ASSESSMENT

- 1 Work should be removed from ring binders, presented so that pages can be turned without having to remove sheets from plastic wallets and securely fastened together eg by means of a tag, then clearly labelled with Centre Number, Name and Candidate Number. Mark sheet/annotation sheet should be attached to each piece of work.
- 2 The Controlled Assessment Mark Sheet(s) should be sent to the Moderator with the MS1. Centres need to make sure that this paperwork arrives to the Moderator by the date specified by OCR and portfolios should be sent within 3 days of receipt of the request for the sample.
- 3 Encourage the candidates to divide their work under headings for the separate Assessment Criteria.
- 4 Where more than one teacher is involved in the assessing of candidates work, the centre should carry out effective internal standardisation to ensure a reliable rank order.

A524 Technical aspects of designing and making

The examination paper was attempted well by the majority of candidates and there was a good range of marks obtained. Candidates were able to attempt all parts of the paper. It was pleasing to see a sound knowledge of nutrition displayed by candidates but some are still losing marks for vague answers such as 'vitamins' and 'minerals'. Knowledge of the functions of ingredients was very weak which was disappointing as this linked well with the criteria for the controlled assessment unit A521.

The design question still causes concern as candidates are failing to show how they have met the design specification points.

Candidates need to be encouraged to read the question through before writing their response. Some candidates did underline the key words in the questions but some underlined the wrong words. In general there were only a few candidates who did not attempt all of the questions and an improvement in the number of candidates who attempted to give full rather than one word answers.

Comments on individual questions:

Section A

Question 1

- (a) The vast majority of candidates gained full marks. The most common response was school children giving reasons linked to a packed lunch or that chocolate chips appeal to children.
- (b) There were positive responses identifying two correct changes to muffins to meet the guidance of the Eatwell-Plate. Popular changes included plain flour to wholemeal, removing chocolate chips and adding a named fruit (blueberries). It was disappointing to see that some candidates did not realise that oil was from vegetables and some candidates suggested changing to butter. Addition of dried fruits and changing chocolate chips to dark chocolate appeared less frequently.
- (c) There was very little variety in the answers, mostly weight of ingredients, consistent size, identical, and taste testing. Visual checks, correct temperature and cooked properly were also seen on a number of papers.
- (d) Generally most candidates gained marks here. Most popular responses were linked to identifying a gap in the market and needs for a specific target group.
- (e) Candidates did not always gain full marks due to incorrect explanations. Correct responses were focused on developing the product further to meet the needs of the user group, types of sensory analysis and links to identifying problems, which would cost the manufacturer less if highlighted during testing on a small scale. The majority of candidates therefore gained two marks.

Question 2

- (a) –
 - (i) It was disappointing that too many candidates answered with heart problems and high blood pressure or referred to rotting teeth. The two popular correct responses were obesity and tooth decay.

- (ii) The vast majority of candidates gained a mark for the correct answer, energy.
- (b) A popular correct answer was icing sugar.
- (c) Responses were disappointing. There was a repetition of 'to sweeten'. Very few candidates knew of the role of sugar in fermentation in bread making or aeration in cake making. There were numerous misconceptions about the role of sugar in the fruit salad with responses stating 'keep the fruit salad fresh for longer' or 'to stop going brown'.
- (d) The majority candidates fell into level 2 (3 to 4 marks). Marks awarded were for discussing sensory qualities, moral beliefs, many included vegetarians, religious beliefs, and dietary needs of diabetics, coeliacs, and lactose intolerant. A limited number of candidates linked their answer to foods with a cultural dimension, cost, and foods in season with a reference to organic crops. Some candidates failed to read 'other than nutritional needs' and consequently they failed to achieve any marks. Where they had understood the question there were some good answers but they were not always well written.

Question 3

- (a) –
 - (i) Most understood the question and correctly named the cheeses.
 - (ii) Most candidates gained one mark for identifying calcium or sodium as a nutrient in cheese. However, too many candidates just stated vitamin without stating which one. Very few candidates gained the second mark.
- (b) It is disappointing that candidates still do not know what has to be on packaging by law. The 'use by/best before' dates are still misinterpreted as 'sell by'. Other incorrect answers stated 'nutritional information and bar codes'.
- (c) Candidates all stated that cheese should be stored in the refrigerator, a small number included 0 – 8 ° C. Most stated the cheese should be resealed in the packet or identified cling film/foil to wrap the cheese in. A small minority stated 'just wrap it'.
- (d) Most candidates gained one mark here. Candidates knew that cheese melts when cooked and were awarded one mark. Candidates gaining full marks identified the cheese becoming stringy. A very limited number of candidates described coagulation and a change to a darker colour.

Section B

Question 4

- (a) –
 - (i) The majority gained one mark here with vitamin C and fibre being the popular answers.
 - (ii) Correct responses included reference to better taste to homemade jam, know what ingredients are in their jam or reference to cheaper than buying jam. A limited number of candidates referred to carbon footprint and free from artificial flavourings.
- (b) Candidates did not link their answers to jam making but gave vague generic responses. Answers stating quicker, cheaper, faster, make loads, which were unqualified were not awarded marks. Candidates do not seem to fully understand batch production. Most candidates gained one mark. Popular correct responses were focussed on all products being identical and buying in bulk and therefore cheaper.

- (c) Candidates did not have a good understanding of how jam making preserves the fruit. A small number identified the high sugar content and boiling but most responses were poor.
- (d) There was a general lack of understanding for what could have been four easy marks here. Many gained two marks for stating freezing and an appropriate food. Those who did gain four marks usually gave pickling and onions for the other method. Some thought lemon juice, blanching, chilling were methods of preservation.

Question 5

- (a) A very limited number of candidates gained full marks by meeting the points in the design specification. A substantial number of cheesecakes or ice cream desserts were seen. Designs were extremely variable. Candidates identified lower in fat products eg lower fat cream and butter. They linked attractive appearance to colours of named fruits or identified layering and swirls as a way of enhancing appearance. Where marks were lost it was due to a lack of understanding of cultural promotion and what foods were suitable for freezing. Some candidates made up their own specification points and failed to address those in the question. However on balance the responses were better than in previous years.
- (b) It was pleasing to see an increase in candidates identifying two different types of promotion. Special offers, trying samples, and different forms of advertising were popular responses.
- (c) There was good differentiation in the responses to this question. Many answers were repetitive and many ignored the manufacturer. Good answers included responding to consumer demand, concerns over increased obesity and appealing to a wider market, which in consequence would increase sales and profits for the manufacturer. To gain high marks on the banded response question candidates must show a detailed understanding, use specialist terms and demonstrate an accurate use of spelling, punctuation and grammar.

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