GCE

Home Economics (Food, Nutrition and Health)

Advanced GCE A2 H511

Advanced Subsidiary GCE AS H111

OCR Report to Centres June 2015
OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today’s society.

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.

© OCR 2015
CONTENTS

Advanced GCE Home Economics (Food, Nutrition and Health) (H511)

Advanced Subsidiary GCE Home Economics (Food, Nutrition and Health) (H111)

OCR REPORT TO CENTRES

<table>
<thead>
<tr>
<th>Content</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>G001 Society and Health</td>
<td>4</td>
</tr>
<tr>
<td>G002 Resource Management</td>
<td>7</td>
</tr>
<tr>
<td>G003 Investigative study</td>
<td>10</td>
</tr>
<tr>
<td>G004 Nutrition and food production</td>
<td>13</td>
</tr>
</tbody>
</table>
G001 Society and Health

General Comments

This session saw a wide range of candidate responses. The paper provided appropriate differentiation, an appropriate level of difficulty and an opportunity for all the candidates to respond to the questions. Candidates were aware of the assessment requirements of each section and most candidates managed their time accordingly. All candidates attempted section A and two two-part questions from Section B which demonstrates that the questions were clear and accessible to all. The paper was completed by candidates with a wide range of abilities and marks were awarded across the whole range of the mark scheme.

There was evidence that a significant number of candidates spent a great deal of time planning answers to Section B questions. Planning should be brief, consisting of a list of key words which the candidate then uses to write their response. Some candidates did not appear to have the skill of interpreting the context of the question and applying their knowledge to the particular question set. It is essential that candidates read all questions fully before answering them, so that they apply their knowledge to gain the highest mark possible. Candidates who demonstrated an understanding of the command words were able to identify the key words and context in a question, therefore producing high level responses. Spelling, punctuation and grammar were generally at an acceptable level although the writing on a small number of scripts was difficult to read.

Comments on Individual Questions:

Section A

The majority of candidates attempted all questions.

Question 1

(a)(i) and (ii) The data was extracted correctly.

(a)(iii) On the whole this was answered correctly, although some candidates incorrectly gave fruit and vegetables as their answer or incorrectly identified the percentage instead of the type of food.

(b) Many candidates correctly identified CHD or blocked arteries as correct responses. Common incorrect responses were obesity and high blood pressure.

(c)(i) Many candidates correctly defined the ‘Welfare State,’ with common answers including government support which provides benefits.

(c)(ii) To gain marks on this question candidates were required to describe one advantage and one disadvantage of the Welfare State. The most common advantage referred to the fact that the system helps to provide an acceptable standard of living. Disadvantages were often not considered in as much detail as the advantages, but responses often made reference to the abuse of the system, the financial burden on taxpayers and the cost of the system. Some candidates confused the Welfare state with the NHS and therefore did not gain marks.

(d) Most candidates accessed two marks for this question. Candidates could have made reference to personal, domestic, auxiliary, day, residential and respite care, Meals on wheels and social support. Incorrect answers made reference to hospitals and nurses or vague responses such as helpers, when the context of the question referred to social care services.
(e) Too many candidates failed to recognise the context of the elderly. Many incorrectly stated that to have a mortgage was more expensive than renting. Few failed to recognise that as the context was elderly they could have made reference to advantages and disadvantages of specific elderly sheltered housing. Common advantages made reference to flexibility of rented accommodation and no repairs to pay for. Disadvantages given tended to refer to the accommodation not being their own, therefore not being able to make changes, and the fact that rented accommodation may be temporary.

(f) Excellent responses referred to the many ways a house can be designed to meet the needs of a person with limited mobility, including widened doorways, the use of ramps and stair lifts, accessible bathrooms, conversion of rooms to bathrooms and bedrooms and homes on a single level.

Section B

All candidates followed the rubric and answered only two questions. Most candidates answered questions 3 and 4. Some candidates wasted time writing lengthy introductions and conclusions which were totally unnecessary. These, if present, should be brief, so as to leave candidates with more time to answer the question.

Question 2

This was the least popular question within section B.

(a) The context of this question related to a description of the causes of tooth decay in children, other than diet, and this was often missed. Many candidates’ responses focused on reasons for tooth decay including diet and failed to recognise that, as answers should have related to children, factors such as the consumption of alcohol and smoking were not relevant. Good answers described fully the cause of tooth decay in children focusing on issues such as not visiting the dentist, poor dental hygiene, not brushing teeth for long enough, not flossing, the use of fluoride in water and the importance of supervising young children when cleaning teeth.

(b) The context of the question related to how changes to dietary habits can reduce the risk of tooth decay, and this was sometimes missed. Candidates should read the whole question and note the context in which it is written. Candidates were often able to explain changes to dietary habits referring to the avoidance of snacking and fizzy drinks, drinking water, hidden sugars, the amount of sugar in processed foods and takeaways and eating fruit as a snack, although often this was in relation to that fact that fruit sugar is natural.

Weaker answers focused generally on nutrition with no reference to tooth decay. There was also a great deal of repetition between part (a) and part (b). Alcohol, drugs and smoking were incorrect as the focus of the question was on diet.

Question 3

(a) Good responses described in detail how a family unit can satisfy basic human needs. Many candidates referred to Maslow’s hierarchy of needs and then took each need and described fully how a family could meet these needs. Higher achieving candidates described issues outside of Maslow’s hierarchy including cultural identity, organisation and values and beliefs. Weaker answers failed to relate Maslow’s hierarchy to the family unit.

(b) This question was answered well. Many candidates were able to discuss the amenities and facilities which may influence where people choose to live. Good responses referred to transport, medical services, access to shops, social, religion, sport, cultural and leisure facilities, education, and employment opportunities. Some good candidates discussed different amenities
and facilities and related these to different groups of people. There were some weak responses where candidates missed the context of the question and discussed issues such as crime rates and types of available housing.

Question 4

(a) The context of the question related to a description of the effects of different types poverty on the elderly. Many candidates demonstrated a good knowledge of the different types of poverty but then failed to relate it to the effects the different types of poverty would have on the elderly. Good responses related absolute and relative poverty to the elderly and described fuel and food poverty, the poverty trap and cycle of deprivation.

Weaker answers failed to relate absolute and relative poverty to the effect on the elderly.

(b) This question was answered well as candidates were able to recognise the links between homelessness and poverty. Many excellent responses discussed fully links such as low income, debt, lack of education, leaving an institution, illness and lack of employment. In weaker responses there was often repetition between part (a) and part (b) of the question.
G002 Resource Management

General Comments

This series provided a wide range of responses. The paper provided an appropriate level of difficulty and differentiation, meaning that there was an opportunity for all the candidates to respond accordingly. The examination was completed by candidates with a wide range of abilities and marks were awarded across this range.

All candidates attempted Section A and the majority of candidates attempted two questions in Section B demonstrating that the questions were clear and accessible. The majority of candidates allocated their time appropriately and completed the whole paper. A few candidates did not fully attempt all the questions, although this did not appear to be because of a lack of time. Higher scoring candidates were able to apply their knowledge and understanding to the questions, their comprehensive answers applying directly to the question. Where responses were detailed, candidates had read and fully understood the question before producing an articulate response. Lower scoring candidates’ answers were generalised, lacked detail and did not answer in context with a few misinterpreting the questions.

Overall candidates were able to fulfil the requirements of written communication; producing a clear written response, using paragraphs and in continuous prose. In general, hand writing was legible and spelling, punctuation and grammar were at an acceptable level. Where plans were evident they seemed to have been of benefit to the candidate.

Comments on Individual Questions:

Section A

Most candidates were able to attempt all of the questions.

1a Candidates all scored full marks on all three parts of this question.

1b Some excellent responses to this question included the, ‘technological advances of cooking equipment,’ and ‘the types of food available’. The question asked about patterns of eating not food choice, so although there were some good responses there were many which then went on to confuse patterns and food choice. When referring to women working, they sometimes failed to explain that women were working longer hours, rather than just working in general.

1c This question was generally well answered, with candidates explaining that there would be, ‘less personal service’. A number of candidates mentioned that self-scanning would be difficult for the elderly, which is not necessarily true.

1d The majority of candidates were able to name three factors necessary for bacterial growth with some good development. The most popular answers were food, warmth and time, and some candidates went on to explain all of the factors fully. Where answers scored highly they would correctly state the ideal temperatures for bacterial growth, PH levels and which bacteria were anaerobes and aerobes. However, some candidates incorrectly stated ‘temperature’ instead of ‘warmth’ as a factor.

1ei Many candidates were able to identify one source of salmonella, although answers sometimes lacked specifics e.g. meat instead of cooked meat or raw chicken. Fewer candidates were able to identify sources of Staphylococcus aureus seemed confused between Bacillus cereus and Clostridium perfringens.
Most candidates were able to state that cross contamination was a method of transmission for Salmonella but few described the method correctly and described contamination by the storage of raw meat. Fewer candidates were able to correctly state the method of transmission of Staphylococcus aureus and gave the answer, people to people. Higher scoring candidates correctly identified ‘droplet infection’.

Section B

The majority of candidates adhered to the rubric and answered two questions. Many additional pages were used this year with a lot of plans in evidence. Most plans were clear, concise and of use to the candidate. The benefit of these was reduced however when time was wasted by producing these at length to the detriment of answering the question. Lengthy introductions and summaries also reduce the amount of time candidates have to answer the question and should be discouraged.

Q2

(a)
There were some excellent candidate responses, giving a comprehensive description of the factors that may influence the selection and purchase of a food processor including, ‘fitness for purpose,’ and ‘reviews and trends’. A few candidates mentioned safety features. However, some candidates misinterpreted the question and focused on the benefits of a food processor or described size, capacity and colour at length without moving onto other factors. A few described labelling of food processes such as BSI kite marks which do not apply to food processors.

(b)
A range of responses was produced for this question. Higher level answers demonstrated relevant examples and a comprehensive evaluation of the different sources of information available to the customer when purchasing goods and services. An evaluation of the information was often missed and candidates often failed to discuss the reliability of the information. A few candidates misunderstood the question and described the labels found on electrical equipment or did not consider the consumer, only the information available to the retailer or manufacturer.

Q3

(a)
This question was popular and again a range of responses was apparent. Higher achieving candidates were able to provide a comprehensive description of the issues to be considered by families on a limited budget with a large number of dependents when managing their food resources. Suitable examples which were used to illustrate the answers included using, ‘starchy carbohydrates’, ‘batch cooking’, ‘using leftovers’ and ‘using cheaper sources of protein’. Few mentioned taking advantage of free school meals for key stage one children. However, a number of candidates misinterpreted the question and responses were confined to saving money when shopping for food with references to ‘buy one get one free’ and ‘buying in bulk’.

(b)
Some excellent and detailed responses by candidates demonstrated a comprehensive explanation of the advantages and disadvantages of online food shopping. Appropriate examples, such as ‘shopping list saved each time,’ and ‘a limited range of products available,’ supported the candidate responses. Lower level answers focused on a limited explanation or a list of the advantages and disadvantages. A few candidates misinterpreted the question and referred to online shopping in general terms, not limited to food shopping, with references to the problems of buying clothes and then returning them.
Q4

(a) Few candidates seemed to have the knowledge and skill to answer this question fully and therefore the performance on this question was disappointing. Most candidates were able to give at least a limited description of how living in a multicultural society has affected food choice. There were a few excellent responses, supported by relevant examples, where candidates referred to a range of ways in which food choice has been affected e.g. provision of foods which adhere to religious requirements such as Halal or Kosher. However, many responses lacked detail and were not clearly linked to food choice. Many candidates mentioned availability of foods to celebrate different cultural events but gave turkey at Christmas or Hot Cross Buns as examples which did not link to the question.

(b) Higher achieving candidates were able to evaluate a wide range of sources of income available to individuals and households including, ‘interest on savings’ and ‘the provision of allowances’. However, for some the evaluation of them was limited and confined to description. Responses from weaker candidates included ‘a job’, wages, salaries and benefits with little evaluation. A number of candidates confused child benefit and child tax credit.
G003 Investigative study

General comments on Administration

On the whole the presentation of work for moderation was very good. Some was beautifully presented for moderation. eg. use of spiral bindings, dividers, excellent use of ICT skills. A small proportion was just loose work in a folder which was more difficult to moderate.

Many of the centres sent their work ahead of the deadline date and enclosed all of the necessary documentation. There was no evidence of arithmetical errors. A small number of centres did not include their Centre Authentication Form. Nearly all centres annotated their candidates’ work and supplied additional evidence – normally by highlighting the assessment criteria. Generally speaking these centres were very accurate and nearly always within tolerance. Occasionally there were differences because of the standard of practical work. Teachers have worked extremely hard with annotating candidates’ work and the majority show good understanding of the criteria.

General comments on the work overall

Some excellent work seen this year where candidates developed innovative and original contexts and titles. They were able to demonstrate a wide range of investigative skills and extensive subject knowledge. Most of the investigations progressed logically and employed a selection of primary research methods.

The majority of the work came from the Nutrition section of G004, a small number of centres followed the D + T process.

Some of the candidates failed to reference the appendices effectively and were over word count. The word count is a maximum of 3000 words.

Analysis, aims and initial research

Web diagrams remain a popular starting point but need following up with a discussion, which shows the opportunities and issues. This was not always done in enough depth. This section was often over marked, because of the lack of discussion.

Some candidates were then able to develop a range of contexts and task titles selecting and rejecting the most appropriate. Too many candidates went from web diagrams to an actual context and title without showing how their ideas developed.

The discussion of the scope of opportunities offered by the potential investigation was usually tabulated, it was completed thoroughly.

Some candidates could do with support on how to write an aim and an objective. The wording of these is key to how the investigation progresses. Candidates need to select an appropriate number of aims, which offered scope for primary research. Some candidates devised too many aims. Eight – ten aims means inevitably there will be a lack of depth to some of the work, or the time frame does not allow all of the aims to be completed.
Planning and development

There is still a little confusion over this criterion. Some candidates had a hypothesis for each aim or area of study. Where the candidates had written a more simplistic hypotheses or prediction of perhaps just one or two sentences arising from their task title they were much more capable of proving or disproving this and these candidates usually referred to it during evaluation. Those with overly complicated or more than one aim were not so successful at this.

The majority of the candidates included a specification but not always related to their practical work and not always detailed enough. Often there was nothing “measurable” so was of little use for evaluation.

The majority of the candidates were able to indicate clearly specific resource materials. This was an area of success for nearly all candidates and tended to be with the time plans. Some of the higher level candidates also included a list of materials necessary for each area of their primary research.

Generally, the plans of action were good and contained realistic timescales. Some candidates included a column with the heading comments, which was useful to keep a log of how and why work was progressing.

Implementation

The process provides the opportunity for candidates to demonstrate a range of skills. The success of the process depends upon the nature of the task. Most candidates completed a questionnaire, interview, food diary and food practical work. Candidates who used a variety of primary research methods tended to produce better work. The majority of the over-marking was in the implementation section. Candidates were often credited in the higher band when, in fact, the work should have been middle band.

There has been a vast improvement in the amount of secondary materials being included in the submission. Many candidates chose to write a summary and sometimes include a screen shot of the book or magazine used. Candidates had carried out a great deal of internet research, with many referencing the web site used. A few candidates carried out additional secondary research later in the work where their primary research and practical work had led them to a specific area. This was more noticeable where a food technology route had been chosen. There is still a small number of centres who are only using the internet as a source.

Questionnaires were nearly always piloted and interviews were well planned. Shop surveys were carried out usually with supporting photographs, and case studies and food diaries were also very popular. There was an increase in sensory testing, or comparative testing. The poorest area was nutritional analysis where the majority of candidates included a print out without any discussion of the findings. Where discussions were included, they often did not show a deep understanding, for example, a dish might have 100% of the day’s protein requirements and the candidates thought this was good, without taking into account the other food to be consumed during the day.

Practical work was mostly excellent using a range of psychomotor skills. Many centres are still using a skills tick sheet which focusses the candidate in to looking at the variety of skills involved in making all their dishes.
Realisation

Some graphs following a questionnaire had no labelled axis or title. The use of three dimensional cone graphs and polo mints graphs are not always appropriate for recording the results. Candidates could be more selective in the choice of which question to analyse, and the choice of graph.

Evidence of the use of digital cameras was pleasing. Outstanding technical competences were demonstrated in a range of ways. Some candidates produced leaflets, fliers, and recipe books. Others included a range of ICT skills in compiling their work. There was very little handwritten work.

Evaluation

Most candidates were very good at writing descriptively about each investigative method and evaluating the outcomes. They also made valid judgements about value of research methods they have used.

Some candidates failed to effectively evaluate their strengths and weaknesses, with strengths and weaknesses tending to focus on practical work rather than the study as a whole.

More able candidates referred to the original aims and hypothesis. However, only a few candidates make critical comments about their findings and research. The ability to reflect on how the research method could have been employed more effectively was omitted or given only a cursory reference by some candidates.
G004 Nutrition and food production

General Comments

Generally candidates used their time appropriately. The vast majority of candidates were able to respond to the questions appropriately and demonstrate positive achievement. The paper also differentiated successfully.

All attempted section A and answered two questions from section B. Only a few appeared to run out of time in section B. Overall, candidates fulfilled the requirements in terms of quality of written communication, producing work written in continuous prose and with clarity of expression. The written response must be contained within the constraints of the examination booklet. The examination booklet has been designed to accommodate the entire response and no additional paper should be required by candidates.

Most candidates demonstrated satisfactory nutritional knowledge and understanding by referring to reference nutrient intakes and government guidance on diet requirements. Some candidates needed to explain their ideas more fully to show the extent of their knowledge and understanding and apply relevant examples in support of the point being made. The best answers were detailed and demonstrated a broad and in-depth knowledge and understanding of the aspect of the specification examined. Some responses were brief and generalised; they needed greater application of knowledge to achieve higher marks. Centres are strongly advised to make sure that candidates fully understand the differences between the command verbs describe, explain, discuss and evaluate. Furthermore, centres are advised to look at the published markschemes in order to familiarise themselves with the level descriptors used when assessing the extended written responses and essays.

Comments on Individual Questions

Question

1(ai) Most candidates answered this question well.

1(aii) Most candidates answered this question well.

1(aiii) Many candidates gave an example of protein complementation, usually beans on toast, but the description of the term protein complementation lacked a reference to amino acids.

1(bi) Generally answered accurately, although a number of candidates mentioned incorrectly green, leafy vegetables.

1(bii) Most correct answers related to the release of energy from carbohydrates rather than using the term metabolism. A number of candidates incorrectly referred to the production of red blood cells.

1(biii) Many answered this correctly, though some referred to the symptoms rather than the deficiency disease which gained no marks. Another common incorrect answer was beri beri.

1(ci) A majority of candidates correctly referred to a relevant processing method that resulted in the loss of vitamin C. Very few referred to ascorbic acid oxidase, although some referred to the effects of ‘enzymes’.
1(cii) Most identified two ways of retaining vitamin C during storage but didn’t give a sufficient explanation to gain the second mark. A number referred to not storing vegetables in water, which was not accepted, and some discussed preparation/cooking methods which didn’t answer the question.

1(d) Most candidates were able to identify three factors that affect energy requirements, with the most popular being age, gender and activity level.

1(e) Generally, well answered although there were many references to sugar substitutes being ‘sweeter so small qualities are required’ rather than an explanation of their nutritional benefits. Explanations tended to be poorly expressed and lacked detail, for example, stating that sugar substitutes are ‘low in carbohydrate making them suitable for those wanting to lose weight’ or references to sugar substitutes not containing fat.

Q2 This question was popular and was answered by the majority of candidates. There were some excellent responses where detailed knowledge understanding was shown of the elderly. High achieving candidates referred to the Eatwell Plate, demonstrated sound understanding of their nutritional needs and some gave accurate Reference Nutrient Intakes.

Some candidates discussed the nutritional requirements but didn’t mention the dietary requirements. Some answers didn’t really demonstrate an understanding of the specific needs of the elderly. Good understanding was demonstrated by candidates referring to issues such as ill-fitting dentures, reduced dexterity and a general apathy towards food. Recommendations for the consumption of citrus fruits such as oranges and lemons for vitamin C were frequent, without demonstrating that, as well as being difficult to peel, they are likely to be far too acidic for some elderly people to eat. The sense of taste alters significantly with age, a point made by a number of candidates in referring to older people having ‘a sweet tooth’ as well as using more salt.

Q3 This question was also answered by a large number of candidates. There was some confusion relating to ethical issues rather than social change and concerns about health. Many candidates included a discussion relating to various health ‘scares’ such as horse meat, salmonella in eggs and BSE etc. An increase in Fair Trade products was frequently mentioned. Candidates generally had plenty to write about and could identify issues of demand and supply (or vice versa) and cause and effect. Candidates who achieved high order marks referred to the question throughout their response and included relevant examples to support their discussion.

Q4 This question was answered by relatively few candidates. Some candidates placed too much emphasis on just one part of the question e.g. cereals, with pulses only addressed briefly. In this type of question, to achieve the higher mark band, a balance needs to be achieved between the different parts of the question and a (brief) plan would be helpful. Most were able to list examples of cereals and pulses, giving appropriate uses. Nuts and seeds were referred to as pulses, incorrectly, by a number of candidates. The nutritional value of cereals and pulses were less well covered with a tendency to mention all the nutrients. Candidates tended to presume that all cereals were high in fibre and very few clearly identified which vitamins and minerals were provided by which cereals and pulses.