

FOOD STUDIES

Paper 9336/01
Theory

Key messages

Candidates should stay focussed on the thread of the question and the command word used. They should aim to improve the planning of compare and contrast responses.

Candidates should consider each part of the question separately. Sometimes there is more than one command word in the question.

General comments

Many centres are to be congratulated on preparing their candidates well for the rigour of an A Level paper. All of the questions had been attempted across the different centres. There were very few candidates who omitted whole or part questions.

All questions were attempted, with **Questions 1, 4, 7 and 8** being the most frequently chosen. **Question 2** was the least often chosen.

Comments on specific questions

Section A

Question 1

- (a) (i) There were many good responses where the correct digestive enzyme was identified and linked to the correct location in the digestive system with responses written in correct logical order through the body. Weaker responses described carbohydrate digestion and briefly linked enzymes. It was common to see peptides mixed up for peptones and the term polypeptides occurred regularly.

Some candidates correctly identified all the necessary enzymes; they sometimes needed to be clearer about digestion in the duodenum.

- (ii) A range of responses were given here with very few candidates gaining full credit. Few candidates used the correct terminology and they made no mention of phenols, or the enzyme phenolase. There was an awareness of the role of oxygen in the oxidation of cut cells but no further details regarding the enzyme and action. Some candidates discussed rotting and decay instead of discussing enzymic browning.
- (iii) Most candidates were able to gain the credit for this question by identifying that rennet clots the proteins in milk in the production of cheese.
- (iv) In this question a mixed range of answers were seen. Very few candidates used the terms hydrolytic rancidity or lipases, and a good number of candidates incorrectly discussed oxidative rancidity. All candidates choosing this question knew that rancid fats give off a foul smell. Deeper knowledge of the reason for the foul smell would have gained more credit.

- (b) The concept of water balance was well known and generally well explained. Many candidates gained further credit by saying that water is lost via sweat and urine, and gained via drinking water and eating fruit and vegetables. A small minority of candidates were able to explain fully the involvement of the kidneys in regulating water balance.
- (c) (i) When candidates are asked for **four** different good food sources of calcium they are expected to name **four** different foods, not groups of foods. Some candidates did not gain credit on this question as their responses were not precise, for example, 'green leafy veg' is not a named food, whereas 'spinach' is; 'nuts' are not a named food but 'almonds' are. Accuracy is expected at this level.
- (ii) The command word in this question was outline. This required candidates to give brief details of the reasons for poor calcium absorption, not only to state the reasons for poor calcium absorption. Candidates who wrote 'lack of vitamin D' made a correct statement and would have gained more credit if they had explained why a lack of vitamin D inhibits calcium absorption.
- (iii) In this question, most candidates correctly responded by saying that the elderly and women wearing their body and faces covered for religious reasons were most likely to be deficient in vitamin D. A commonly named incorrect group was children/babies. A small number of candidates incorrectly stated vegetarians and very few stated vegans, though that would have been correct. Many candidates were unable to give appropriate symptoms for the groups of people stated. Many could name rickets and osteomalacia. If they had also given the appropriate symptoms of these diseases further credit would have been gained.

Question 2

- (a) This question was generally answered well and most candidates were able to name six appropriate nutrients found in oily fish. Weaker responses did not include a correct function for each of the given nutrients and there were a good number of candidates who responded with omega-3 or omega-6, but as these are fats they were discounted by the question.
- (b) (i) In this question it was common to see responses where one correct vitamin was given, but rarely two. Candidates needed to explain that fat soluble vitamins are stored by the body and therefore can accumulate to toxic levels if eaten in large amounts.
- (b) (ii) Candidates found this question very challenging. Often the elderly and children were given as incorrect responses. Candidates need to ensure that they have knowledge and understanding of this topic.
- (c) On this question, answers showed a good understanding of the menopause, loss of iron, and the need for more iron during menstruation. Candidates could have gained full credit on this question if they also mentioned the risk of anaemia when menstruation occurs.
- (d) There were some very good responses here. Candidates must ensure that they are clear about which form of iron ion is which: ferric (Fe^{3+}) and ferrous (Fe^{2+}) iron.
- (e) In order to achieve full credit on this question candidates had to discuss storage, preparation and cooking. Often candidates focussed only on cooking and limited the amount of credit that they could gain. There was knowledge shown that heat, alkali and oxygen affect Vitamin C content. Further credit would have been gained if candidates had provided the detail for the discussion required. For example, a candidate who wrote 'vitamin C is oxidised in the presence of oxygen', whilst correct, would need to add 'therefore prepare vegetables just before cooking to avoid exposure to oxygen for too long' to be able to gain full credit.
- (f) Candidates should be prepared to be asked questions that are worded differently as this tests their knowledge and understanding fully. This question asked candidates to give four points for a healthy diet and then say why those points are necessary in a healthy diet. Accuracy was essential in order for candidates to gain credit for this question. For example, a candidate who wrote 'reduce fat to improve heart health' would not be awarded the credit because it is the reduction of saturated fat that improves heart health.

Question 3

- (a) This question was generally well attempted. There was good knowledge shown and good explanations given for personality, lactation, pregnancy, thermogenesis, climate, illness and activity level. It was, however, still common to see references to age, gender and occupation despite the question saying 'other factors'. Sometimes candidates' responses needed to show clearer understanding, for example, some candidates wrote that 'in a cold climate you don't go out and do much, so don't need much energy'. This is not the correct response and candidates are expected to know that in colder climates BMR tends to be higher due to the body's need to keep body temperature stable. Likewise, when a person is ill or injured, their BMR is higher due the body's need to repair, regenerate and synthesise new cells.
- (b) Candidates found this question challenging. Candidates made sensible suggestions as to the types of foods that cause obesity, e.g. fast foods. However, they also needed to make the link as to how this influences obesity. Responses should have been a discussion, as required by the question.
- (c) Candidates need to ensure that they know and understand this area of the syllabus. Many candidates made reference to glycogen formation. They also needed to show an understanding that the energy came from carbohydrates and was stored as fat. It was common for candidates to write 'people eat too much fat and it is stored as adipose tissue'.
- (d) Many good attempts were made on this question and drawings included sketches and molecular diagrams. Candidates knew that amylose is linear and coiled into a helix, and that amylopectin is branched. To achieve full credit candidates needed to use the correct terminology.
- (e) This question was answered very well. Disaccharides, enzymes and products were well known and explained clearly.
- (f) On this question candidates often gained partial credit for naming an oligosaccharide. Further credit was available if the candidate was then able to explain its function in the body.
- (g) Candidates found this question challenging. They needed to be able to identify cellulose and to make reference to beta-glucose molecules.

Question 4

- (a) There was a good general awareness of *cis* and *trans* fatty acids given in extended writing. Diagrams were varied, and not always correct. Many diagrams did not show double bonds.
- (b)(i) There was excellent knowledge shown on this question with a logical digestive order being described and good use of the correct terminology.
- (ii) This question was answered equally as well as (b)(i) and candidates often provided supporting diagrams.
- (c) In this question candidates often stated five functions of fat in the body. Credit was available if the candidate went on to provide the information to describe the functions. For example, a good response would say 'protects the vital organs' and would go on to explain how. The most frequently seen response was 'fat provides fat-soluble vitamins'. The candidate was awarded credit for this if they then stated what the fat-soluble vitamins are.
- (d) Some invalid examples of fatty foods were given in this question. For example, butter was often given; however, this is not a fatty food that is packaged in MAP.
- Many candidates showed awareness of the oxidation of foods and discoloration of foods, and that modified atmosphere packaging helps to extend shelf life. Good responses gave detail of MAP, the gases used and the gases that are removed, with the consequences.
- (e) Responses to this question needed more detail to gain full credit. Candidates are expected to be able to describe in detail how a tooth becomes damaged by acid in the mouth that is produced by bacteria feeding on the sugar left on the teeth. Often candidates wrote incorrect responses suggesting that bacteria eat away at the tooth. Accuracy is expected.

Section B

Question 5

- (a) This question was well understood, and well answered. Examples were usually well matched to the plant part.
- (b) (i) Candidates need to ensure that they can define the term *functional foods*.
- (ii) Many responses showed a limited knowledge of the terms *stanols* and *sterols* but good awareness was shown of the link between stanols and sterols and the reduction of CHD through a reduction in LDL cholesterol.
- (c) Candidates need to ensure that they know and can discuss the benefits of fair trade. The main correct response was that fair trade products are quality products.
- (d) Candidates needed to be able to define autolysis. They did show knowledge of it being linked to decomposition. Good descriptions of the tomato undergoing autolysis included wrinkled skins and discolouring.
- (e) Candidates showed good knowledge about ice crystal formation and the destruction of the apple's cells during freezing, resulting in a mushy apple upon defrosting.

Question 6

- (a) Good knowledge was shown and candidates scored well.
- (b) Many candidates had answered the question well, in a logical manner and using appropriate terminology. If a candidate had not identified the ingredient or used the correct terminology they were unable to gain credit.
- (c) Candidates found this question challenging. Most candidates could state electric mixer. Safety points often referred to wet hands and electric shocks. Responses sometimes suggested how to use a mixer to get the best volume of air into the cake, however, this was not asked for in the question.
- (d) The most frequently seen correct responses were choux pastry and flaky pastry. A number of candidates suggested products that used the cooking method known as steaming, for example a steamed pudding or steamed buns. These were incorrect responses as they do not use steam as a raising agent but as a method of heat transfer. The mark scheme point about the water heating quickly was rarely seen.
- (e) In this question, responses often focussed on the fact that the microwave has no flame and does not need preheating so the child is less likely to burn themselves. This was good knowledge. Many candidates needed to maintain focus on the safety aspect of the question.
- (f) (i) Very few candidates knew that the method of heat transfer was radiation.
- (ii) It was clear from the responses to this question that a number of candidates were unfamiliar with the term *braising*. Good responses were made by candidates who described the sensory differences and similarities between the two meats, and candidates who made an attempt to explain how the differences had been brought about. Some candidates attempted a simplistic comparison of the nutritional value of the meats.

Question 7

- (a) Candidates found this question challenging. Many candidates repeated the key word of the additive, for example, 'a thickener is used to thicken', 'a stabiliser stabilises food'. Very few candidates identified and described three additives well and key terminology was lacking.
- (b) There was plenty of secure knowledge of intolerances seen. Candidates need to be clear about the definition of and symptoms of an allergy.

- (c) This question was well answered.
- (d) Most candidates had a good overview of food hygiene. To gain maximum credit candidates needed to give explanations to support their examples.
- (e) (i) Very few candidates correctly identified the bacteria. There was sound knowledge that the bacteria came from the chef (his open wound and septic throat).
(ii) Very few candidates cited toxins. Most candidates mentioned cross-contamination in line with the chef's ill health.
(iii) This question was found to be challenging. Candidates needed to provide the detail of time and temperature. It was common to see candidates write 'bacteria are dormant in the fridge' or 'bacteria are killed in the fridge', both of which are inaccurate responses.

Question 8

- (a) (i) Some candidates found this question challenging as they did not always have the correct ingredients in the dish. Most candidates did know the ingredients and correct functions of the egg custard. Few candidates were able to accurately discuss the mayonnaise, with some candidates suggesting the use of egg whites. A lack of detail of the function of the ingredients limited the credit awarded.
(ii) Very few candidates answered this question correctly.
- (b) Candidates were often able to describe sensory changes. Further credit was available for explaining why the change had come about.
- (c) Responses showed some knowledge and understanding of the storage requirements for potatoes and rice, and their justification. Candidates were not awarded all the available credit if they discussed potatoes and rice together, as both have differing storage requirements.
- (d) This question was discounted.
- (e) Many candidates gave good advice on how to extinguish a fire; however, they also needed to give reasons to be awarded credit. Few candidates referred to the fire triangle.
- (f) The majority of candidates focussed correctly on savoury buffet food. This question was very well answered by those candidates who suggested foods onto which the garnish could be placed.

FOOD STUDIES

Paper 9336/02
Theory

Key messages

The quality of the written answers was generally good. Scripts were set out clearly and candidates had sufficient time to complete all sections of the paper. Candidates should ensure that pages are assembled in the correct order before the scripts are handed in.

Time plans were generally very good and gave clear instructions on methods, cooking times and temperatures. Candidates need to ensure they give a chronological plan of work rather than stating the time taken to complete each process. Most candidates listed an appropriate amount of work to be carried out in the half-hour preparation time before the start of the Practical Test. Candidates should be reminded that any processes that are part of the preparation of dishes, e.g. preparing puff pastry, whisking egg whites, creaming mixtures and dissolving gelatine, should not be carried out in the preparation time. In some cases, an inordinate amount of work was undertaken before the start of the Practical Test.

Candidates need to ensure that they give appropriate detail when giving practical reasons for their choice of dishes. It was expected that candidates might mention that the cost was not high, with examples, e.g. chicken thighs may be cheaper than chicken breast, or that seasonal produce or garden produce would be used, again with examples – candidates need to state which fruit/vegetables are in season or which ones are grown in their gardens. Other points could have been that a dish was to be served cold and did not require the use of an oven thus making oven management easier, or that the use of labour-saving equipment was demonstrated, with examples. Sometimes comments were made about the type of meal for which the dish would be suitable or suitable accompaniments for the dish; these are not practical reasons for choice. It is also not appropriate to discuss possible variations or to mention that a dish could be made in advance and frozen for future use or could be used for a birthday party or taken on a picnic.

Candidates should ensure that the dishes they choose are skilful and allow them to demonstrate a range of practical skills. Candidates who include a range of skilful dishes gain more marks than those who only choose simple dishes. Candidates should include detail of the skills that they are using, e.g. the apple pie is made using shortcrust pastry, the cream buns are made using choux pastry, etc.

Candidates were asked to comment on the nutritional value of the dish chosen in part **(b)** of the question. Some candidates gave excellent accounts. Candidates need to ensure they refer specifically to the dish in part **(b)** and that their responses contain precise detail. It is expected that candidates will note, for example, that egg yolk contains fat, which is a source of energy, or that HBV protein, which is important for growth, is obtained from milk. Nutrients must be linked to ingredients **and** to functions in order to gain marks.

General comments

Centres need to ensure that they use the current mark sheets and marking guidance. Forms should be downloaded from the samples database each series. Further guidance is available in the current version of the syllabus.

Teachers who undertake the marking of the Practical Test are reminded that the Mark Scheme published by Cambridge International must be followed accurately. Reference must be made to the list of dishes planned on the Preparation Sheets.

Before the Practical Test, the examiner must prepare an Individual Mark Sheet for each candidate. The maximum mark available for each dish, together with the mark awarded, must be clearly indicated on the Individual Mark Sheet. Some candidates chose dishes that were not appropriate, or were not sufficiently skilful for this level; fried chicken and fried rice are examples of such dishes. If a candidate chooses a simple dish, the maximum mark possible for that dish must be reduced. If a skill is repeated in other dishes, the maximum marks must be reduced on the second and any subsequent occasions. It is rare for any dish to be worth full marks, and only the best-performing candidates prepare several dishes that are worthy of full marks. It is possible that none of the candidates in a centre will have their dishes marked out of the maximum possible mark. Teachers must use their discretion and their professional judgement to ensure that the maximum mark for each candidate fairly reflects the complexity, or otherwise, of the dish.

Detailed comments must be written to justify each mark awarded. Reference should be made to the colour, flavour and texture of each dish and perhaps to consistency, if appropriate. Examiners should ensure that comments are made about the merits, or otherwise, of **each** individual dish. Sometimes the mark awarded was too high when comments suggested that there were many negative points to be taken into account when deciding on a mark for the dish. If a dish is inedible because it is undercooked or overcooked, it should be given zero.

Any dish planned but not served should not gain any marks; those marks cannot be transferred to other dishes. Any dish prepared that wasn't included in the original plan cannot be awarded marks.

It is important that examiners give as much information as possible on each candidate's Method of Work in order to justify the mark awarded. Candidates need to demonstrate a wide range of skills, at least seven or eight different skills, in order to score high marks in this section. In centres where the practical examination is marked by two separate examiners, the examiners should internally moderate the work to arrive at a consensus in order that one mark is submitted for each candidate.

Comments on individual questions

Question 1

Most candidates used four different types of protein that would be suitable for a lacto-ovo vegetarian. Soya was used to make a variety of dishes including soya gougere which showed the making of choux pastry. Eggs were used to make cakes, soufflés and quiches. Milk was used to make batters and cheese was used to make cheesecakes. Lentils were also used to make rissoles or fillings for pies.

Written Answer

Very few candidates were able to list the eight essential amino acids for adults. Occasionally candidates mentioned histidine and arginine which are essential for children. Some candidates did not answer this part of the question or gave incorrect information, for example a list of nutrients.

Most candidates were able to describe how a vegan could ensure a good supply of protein by mentioning the use of soya and protein complementation. Most candidates were also able to discuss how a vegan could ensure a good supply of iron by consuming green leafy vegetables. Many candidates also went on to mention that eating foods which contain vitamin C assist in the absorption of iron.

Question 2

Some candidates used four different staple foods: wheat flour was used to make a variety of dishes, rice was used to make biryani or as an accompaniment to a more complex dish, corn was used as part of a sauce in the form of cornflour and some candidates used sweetcorn as part of the filling for a pie, potatoes were used to make fish cakes or the topping for a shepherd's pie and soya beans were used to make gougeres or as fillings for pancakes.

There were a number of candidates who were confused by staple foods and made different foods using the same staple. For example, flour was used to make a cake, digestive biscuits were used to make the base of a cheesecake and then a pasta dish was made; all these foods are made from wheat.

Written Answer

Many candidates mentioned that staple foods are inexpensive, regularly consumed and are one of the main energy suppliers in the diet. A few candidates mentioned that wheat could be made into flour, breakfast cereals and pasta and that potato could be made into flour. Candidates who were confused about what constitutes a staple food were not able to answer this part of the question well.

Question 3

Many candidates chose to answer this question. Milk was used in a variety of ways with candidates making quiches and batters. Butter was used to make cakes. Yoghurt and cream cheese were used to make cheesecakes. Cream was used to fill eclairs and to decorate cakes. Cheddar cheese was used in quiches or in sauces.

Written Answer

Most candidates were able to explain why milk needs to be heat treated. Some candidates went on to write confused accounts about sterilisation, often describing pasteurisation instead. Explanations about dried milk were usually accurate. Candidates were able to give detailed accounts of the nutritive value of milk.

Dish to show the gelatinisation of starch

Candidates chose to make pancakes filled with a white sauce, lasagne with white sauce and choux pastries filled with crème pâtissière, all of which answered the question. These are good dishes to make as they show a variety of skills. One or two candidates made puddings or pau which were steamed. A few candidates chose to make a cheesecake which used gelatine as a setting agent and does not show the gelatinisation of starch.

FOOD STUDIES

<p>Paper 9336/03 Coursework Investigation</p>

Key messages

It is strongly advised that candidates have access to section 7 of the syllabus which outlines the parameters required of the Coursework Investigation with indicators for scoring within each section.

It is recommended that candidates state how the subject of the Coursework Investigation is appropriate to the syllabus by noting the section of the syllabus.

The conclusion and evaluation sections should include direct reference to each of the original aims and objectives of the Coursework Investigation.

Candidates are reminded to adhere to the word count.

General comments

As in previous years a high proportion of the individual studies were well presented, interesting and instructive indicating a high level of commitment on the part of most candidates. There were many impressive and varied titles showing originality of thought and freshness of ideas with clearly defined titles set within realistic boundaries. Overall the general quality of the work presented had improved although there were some which were little more than a project rather than an investigative study.

It was helpful when candidates followed the framework set out in the syllabus as it provides a valuable, logical template and gives useful information on the criteria used to award marks under each section.

Some candidates spent a disproportionate amount of time on the theoretical research element. They should also spend appropriate time on areas such as conclusion and evaluation which carry just as many marks but are far too often given only a few lines of consideration.

Many candidates provided appropriate photographic evidence for tasting panels, visits and market surveys.

Choice and justification

In this section candidates should be encouraged to choose a subject for their study in which they are able to demonstrate their ability to collect data in a variety of ways, indicate how it relates to the syllabus and state why they have selected the topic for research.

The title must be relevant to the syllabus. The title must have clearly defined parameters in order that the limitations of the study can be appreciated. A title such as, 'The impact of using different fats when making shortcrust pasty dishes', clearly gives parameters, whereas one entitled, 'Pastry making', sets few limits.

Although the execution of the work is unsupervised, the suitability of titles should be checked and advice given to candidates if a proposed Coursework Investigation is outside the syllabus.

Candidates are expected to justify their choice of selected area of study with at least four reasons. Media articles on world health issues, initiatives by local government, personal or family experience of non-communicable disease are all acceptable as appropriate reasons.

Candidates are expected to outline clearly, but briefly, the investigative methods and resources they intend to use in their Coursework Investigation. There is a check-list to help with selection in the syllabus.

Planning

In this section, the aims and objectives of the investigation must be clearly defined. The main aim is always to investigate the problem as set out in the title; the objectives are practical, achievable tasks that can help to accomplish the overall aim. Candidates should give several objectives, since these are the benchmarks against which the success of the investigation can be judged when evaluating their work. Candidates often stated that one of their objectives would be to educate members of a community on a particular topic. It would be impossible to quantify the success of such an objective.

In order to achieve high marks it is important to explain how each method of data collection will help to achieve particular objectives. Some candidates mentioned the methods they intended to use but gave no further information to link the method to stated objectives.

When questionnaires or interviews are used, how respondents are selected should be explained and there should be a rationale for the type of questions included. If food diaries, visits, observations, market surveys or tasting panels are used, explanations for choosing these methods of data collection should be given.

Better-performing candidates compiled a chart to highlight *how, where, when* and with *whom* the investigations were to be carried out. They also included which of their objectives were being met, as well as how results would be collated.

As indicated in the assessment scheme, samples of questionnaires, food diaries, market survey plans, interview questions and so on should be included in the appendix.

Candidates should demonstrate their ability to be logical in their planning. Many candidates listed their proposed activities giving dates when tasks or stages were to be executed or completed. This shows the importance of thorough, logical planning and an appreciation of the amount of time which needs to be allocated to certain procedures.

Theoretical Research

The purpose of this section is to give candidates the opportunity to research their topic widely before producing a succinct summary of selected information tailored to their study. All investigations gave evidence of research but the amount, quality and relevance was variable.

Accounts needed to be coherent and of appropriate length. Some were disjointed and too long because every available piece of information from one source was followed by that from another, so there was considerable repetition of information, as well as differences in writing style and presentation. Some candidates repeated information which had already been given in an introduction or abstract. Some failed to keep to the parameters of their focus group for example quoting the RDI for calcium for all groups in society is irrelevant in a study which is researching the need for calcium in pregnant women.

The better performing candidates consulted a variety of books, articles and websites and summarised their findings in their own words acknowledging sources of diagrams, figures, charts and text where appropriate. It is commendable if candidates include topical information, perhaps from newspaper or magazine articles, Government reports or from the internet. Reference to this information can be incorporated into their account but the article or extract should be included, in its entirety, as an appendix.

It was encouraging to note that nearly all investigations included, as an appendix, a bibliography of articles, books, websites and suchlike material which had been consulted.

Investigation skills and data handling

This is an important section with an allocation of 20 per cent of the total mark. The most successful investigations used a wide range of qualitative and quantitative investigative methods suggested in the syllabus to collect data. Clearly, if a candidate chooses two methods of investigation, the maximum score possible will be lower than that of a candidate who chooses five methods.

Some candidates visited local markets, shops, farms, restaurants or factories whilst others observed, conducted questionnaires and compared and evaluated cooked dishes. Many photographs were included which were particularly useful to support the authenticity of the investigation. Candidates are advised to include their candidate number alongside photographs of their practical dishes.

It was pleasing to see a good knowledge of sensory testing shown by statements regarding the provision of water, random labelling and the provision of clear instructions to tasters of expectations when completing rating sheets. Candidates should be reminded to keep their practical work simple. A tasting panel is not a cooking practical test; it is there to provide evidence to support the aims and objectives of the study. Some candidates used answers from the questionnaires to decide on the dishes they made, some did comparative work demonstrating how to modify a recipe, others used ranking tests to test reaction to the inclusion of specific ingredients in recipes. Many candidates used nutritional analysis in support of their testing.

When compiling questions to include in interviews or questionnaires, candidates should give careful consideration to each question. Questionnaires should not contain too many questions, and they should be carefully phrased to get responses that can be collated, analysed and reported on effectively. Teachers appeared to have addressed the issues of discretion and confidentiality and very few personal, intrusive questions likely to have caused embarrassment were included in questionnaires this year. It is still a matter of some concern that a few candidates are continuing to interview very busy professional people and ask questions which could be answered by other means of research. It is the experience of carrying out interviews that is important, not the status of the interviewee. It is acceptable to e-mail professionals rather than carry out a personal visit which is often very difficult to schedule.

Candidates should be encouraged to utilise food diaries, food frequency tables and 24-hour food recall charts more thoroughly. They are a valuable resource and can yield a great deal of useful data if used correctly. If the study is focused on one specific nutrient, e.g. calcium, then instead of the respondent filling in all meals eaten, a check list can indicate when a food containing calcium is consumed. It is a lot easier and less time consuming to collate the resulting data and much easier to do a nutritional analysis of amount of calcium eaten for comparison with the respondents RDI.

Findings were generally well presented in a wide range of different ways with the inclusion of titles and appropriate annotations.

Conclusions

This process allows candidates to provide an accurate summary and analysis of the evidence collected from their investigative and theoretical data. Candidates need to ensure that they provided evidence to support the conclusions drawn. A small number of candidates very clearly summarised their findings by linking specific parts of the data to a recommendation. To gain credit conclusions must be supported by facts from the data which can then lead to relevant recommendations linked to the original aims and objectives.

These recommendations could be for implementation by individuals, families, organisations or governments. They may or may not be wholly practicable but the importance is in the fact that the candidate can develop solutions based on the evidence of their investigations. Whatever form the recommendations take, they should be seen to be as a result of careful thought on the part of the candidate to develop solutions in the light of information gathered from their study. It is an opportunity for candidates to give their own logical ideas from the findings of the study.

Weaker candidates listed recommendations that had only very tenuous links to the investigation title or made suggestions for educating large numbers of people on a range of matters unrelated to the original aim and objectives. Proposals should be realistic, although there may be time or financial constraints attached.

Evaluation

Many candidates attached little importance to this process and wrote very briefly and only from a more personal perspective of completing the study. It is expected that each section of the Coursework Investigation should be reviewed and comments made on the strengths and weaknesses of the work. This is not supposed to be an area solely for candidates to describe their own strengths and weaknesses; it is a forum to revisit and review each aspect of the whole Coursework Investigation and make suggestions for improving weak areas and extending the research.

Candidates should consider whether the original aim and each objective have been achieved. The planning work should be considered and constructive judgement given to the original proposed timings, comparing the expected time taken with the actual time expended.

The success or lack of success of each of the methods of data collection and collation used should be analysed and critically appraised.

Most candidates were able to state personal benefits they had gained from doing the study and these were well communicated. Some candidates mentioned that they had become more confident and had enjoyed meeting people from other backgrounds; others were pleased to have become more adept at using particular computer programmes. Sometimes candidates described problems they had encountered and described how they had dealt with them. This was commendable since it is often considered that weaknesses should be overlooked.

Presentation

Candidates are to be congratulated on the presentation of their work. Almost without exception candidates produced work which was attractively presented, logically and sequentially organised and consistently formatted. Candidates should, however, be reminded to adhere to the word limit, some studies far exceeded the expected length. In some centres candidates had included a word count on the front cover which was very helpful.

As a result of their Coursework Investigation, some candidates included original pamphlets, posters and even a PowerPoint presentation they had designed themselves to use with their target group or in classrooms, canteens and community halls. This was an original and very interesting development to the study and showed commendable effort.

