

# **GCSE EXAMINERS' REPORTS**

GCSE (NEW) FOOD AND NUTRITION

**SUMMER 2019** 

© WJEC CBAC Ltd.

Grade boundary information for this subject is available on the WJEC public website at: <a href="https://www.wjecservices.co.uk/MarkToUMS/default.aspx?l=en">https://www.wjecservices.co.uk/MarkToUMS/default.aspx?l=en</a>

#### **Online Results Analysis**

WJEC provides information to examination centres via the WJEC secure website. This is restricted to centre staff only. Access is granted to centre staff by the Examinations Officer at the centre.

## **Annual Statistical Report**

The annual Statistical Report (issued in the second half of the Autumn Term) gives overall outcomes of all examinations administered by WJEC.

Unit	Page
Unit 1	1
Unit 2	5

#### FOOD AND NUTRITION

## GCSE (NEW)

## Summer 2019

## **UNIT 1 - PRINCIPLES OF FOOD AND NUTRITION**

#### **General Comments**

- A promising number of candidates are attempting questions and attempting to apply knowledge. There are still a few candidates not attempting some questions.
- Literacy is still a cause for concern, as on times respones are difficult to interpret due to the quality of the handwriting. WJEC offers centres the opportunity to complete the exmination using online assessment, which could benefit some candidates.
- Reading questions is still a weakness for many candidates. Mis-understanding and choosing the wrong focus is often the reason why candidates are not able to access higher marks. Candidates need examination technique practice and guidance on interpretation of command words used in questions.
- It was pleasing to see a number of candidates draft a plan to help construct a good evaluation for the longer response questions in particular question 8. This should continue to be encouraged by centres as it strengthens the candidate's ability to focus on the key words.
- Encourage candidates to spend time preparing and revising for the examination rather than spend too long completing controlled assessment.
- It would be beneficial for some candidates to reiterate key words and technical terminology, for example collating a glossary of terms or a list of terminology. This may enable a more efficient understanding of examination questions.

#### **Comments on individual questions/sections**

- 1. (a) Most candidates were able to correctly identify the main ingredient used in fresh pasta.
  - (b) Many candidates were able to correctly suggest a natural ingredient that is often used to colour fresh pasta. Popular responses included ingredients such as 'squid ink', 'beetroot' and 'spinach'.
  - (c) Many candidates could recall knowledge to correctly identify a named traditional pasta shape. Popular responses included fusilli, farfalle and spaghetti.
  - (d) A majority of candidates were clearly able to apply knowledge to correctly explain why pasta is unsuitable for a person with coeliac disease. Strong responses were able to correctly explain the reference to gluten and also included the reason why pasta is unsuitable.

- (e) A majority of candidates attempted this question that demonstrated an appropriate level of nutritional knowledge. Many candidates were able to correctly identify the main nutrients provided by pasta and could clearly link this with the specified target group of an active young adult. High quality responses also made reference to the overall value that a food stuff such as pasta can provide a young adult.
- 2. (a) This question was answered very well with a majority of responses correctly identifying a function of sugar. In a minority of responses pupils had clearly misread the question and offered incorrect responses.
  - (b) This question was answered successfully with most candidates correctly identifying eggs as the main source of protein from the list of ingredients provided.
  - (c) This question offered varying responses. A majority of candidates were able to draw on knowledge gained from practical lessons and correctly identify why a sponge cake may collapse in the centre. However, a minority of candidates were unable to offer sensible reasons often providing a guess.
- 3. (a) Many candidates were able to correctly identify the difference between a complex and simple carbohydrate. Strong responses included further detail of nutrient structure and could also provide examples to support responses, showing evidence of effective exam technique. However, there were a few responses that had unfortunately provided a response that confused the difference between a simple and complex carbohydrate which resulted in a surprisingly high number of candidates scoring zero marks.
  - (b) This question was attempted in varying responses. A majority of candidates were able to correctly identify ways in which an individual could decrease consumption of simple carbohydrates. Examples provided in good quality responses were strong and featured realistic suggestions. There were however a minority of candidates that interpreted the question as ways in which to increase complex carbohydrate. In a few responses candidates and interpreted the question as ways in which to increase dietary fibre content.
- 4. (a) Most candidates were able to interpret the data provided from the graph showing elements of good numerical understanding.
  - (b) This question offered varying responses from candidates. Many responses insufficiently evaluated the use and convenience of ready meals, rather than discuss and evaluate the current range available. Effective responses included good discussion of many of the different dietary needs and various ready meals that can cater for all consumer needs.
- 5. (a) Many candidates were able to provide sound knowledge of chemical changes that occur to protein during the cooking of meat. There were a number of responses that were weak, offering limited explanation of the changes that occur during cooking of meat. Those candidates that could demonstrate very strong terminology were able to apply knowledge gained from practical experiences.

- 5. (b) This question was well answered. Many candidates were able to show evidence of the farming industry and could demonstrate how food provenance has become a topical cause over the years. Many candidates were able to link traceability issues to both the farming industry and the consumer. There were clear links made to the process of tracing meat origin, food standards and food packaging. Weaker responses were able to briefly identify how a consumer might identify logos used in the industry on food packaging.
- 6. (a) The majority of candidates were able to correctly name food poisoning bacteria.
  - (b) Many candidates were able to identify factors that bacteria need to grow. In weaker responses candidates were not specific about factors and volunteered responses that identified types of bacteria.
  - (c) Food safety and hygiene continues to be an area of strength for many candidates. Some candidates offered a very high standard of response showing excellent knowledge of hygiene and safety, clearly emphasising correct and thorough practices taking place within lessons. Many candidates were able to support responses with correct temperatures and procedures for storing, cooking and serving foods.
- 7. (a) Responses to this question offered varying degrees of accuracy. A disappointing number of candidates were unable to attempt this question. It was clear that on a number of responses the question was not understood and the technical terminology emulsification and aeration were misinterpreted. Strong responses provided detailed understanding to a named food product and volunteered thorough explanations of the function of eggs in emulsification of foods such as mayonnaise and aeration in food products such as meringues.
  - (b) Generally candidates were able to identify the main nutritional value of eggs in the diet. Macronutrients were clearly identified by a majority of the correct responses. However, there were a limited number of responses that indicate knowledge of further nutritional value of micronutrients. Nutrition generally is satisfactory at this level and few candidates are unable to correctly identify the main nutrients found in eggs.
- 8. Generally this question was answered very well with many candidates producing well structured responses. Many candidates were able to select, recall and apply knowledge of the social, religious, moral and ethical factors. Many candidates structured responses with commentary on all four factors, producing a balanced evaluation. Strong responses include the challenge within families to cater for all of the factors and supported points with high quality examples. Religious factors were attempted very well with many candidates offering good knowledge of the different types of dietary needs linked to religion. Many candidates also volunteered strong points for ethical considerations. Popular responses discussed animal welfare, food miles and the importance of supporting local farms. Many candidates made links with the rising cost of food and the effect a busy lifestyle can have on meeting all needs of a family. Many diverse responses were provided.

# Summary of key points

Based on their performance on this paper, candidates are offered the following advice:

- Revise carefully, remembering practice makes knowledge permanent.
- Effective study skills and good exam technique will give you the confidence to perform well in the exam.
- Exam stamina is essential read the whole exam paper before you start, so you can see where the marks are allocated. Plan your time linked to the mark allocation big mark questions need more of your time.
- The command words (give, state, name, describe, explain, evaluate, assess) tells you how to answer the question and what to do with your answer.
- Proof read your answers and checks facts.
- Describe/explain type question require more practice. Candidates must support their answers with examples and linked responses in order to access the full marks available.
- There is enough space provided in the question paper for your answers. Always plan your answers carefully and if you need more space, use additional sheets.
- If you use additional paper, annotate this in the margin next to your answer and then continue onto additional paper.
- Familiarise yourself with the format of the data responses questions and practice these type of questions regularly.
- Draft the extended writing answers carefully to ensure you present a balanced answer for discuss and evaluate questions.
- Revise thoroughly and use internet revision sites or subject related textbooks to check your knowledge and understanding.
- Make sure your hand writing is legible.

#### FOOD AND NUTRITION

#### GCSE (NEW)

#### Summer 2019

#### **UNIT 2 – FOOD AND NUTRITION IN ACTION**

#### **General Comments**

Thank you to the centres that submitted their coursework early; this greatly assists the moderation process. There were a few centres that submitted coursework well past the deadline – the date for the submission of coursework is always 5<sup>th</sup> May each year. Marks should be entered online via the secure system in good time to ensure that the work is with the moderator by the 5<sup>th</sup> May. Should the moderator request to see further samples from a centre then this work must be ready to be sent immediately with all the necessary authenticated FN sheets. The FN coversheets must be completed for all learners, not just those selected for the moderation sample.

It was pleasing to see that work was more accessible this year with far fewer centres sending work in Polly Pockets. There were some issues with the labelling of candidates' coursework; each page of work submitted by a candidate should be clearly identifiable with a header or footer informing the candidates name, number and centre number.

Annotation on the FN coversheets greatly assists the moderation process and enables the moderator to see how and where marks have been awarded. Many centres provided this annotation and we would encourage that all centres follow this good practice.

Photographic evidence of practical outcomes is vital to the moderation process and was provided in the majority of the candidates' work. Some of the work seen included photographs that were too small to be able to see the quality of the finished items or were in black and white, and some of the work seen did not include any photographs at all. Clear, colour photographs should be provided in the folios of any items that have been made as this is the only opportunity the moderator has to see candidates' practical outcomes and to see if the marks awarded have been fair and accurate.

It was pleasing to see that, on the whole, marking had been more accurate. The majority of centres were able to identify the correct mark band and award marks accordingly. There were some centres that were generous with the marks awarded and those centres would be advised to heed the advice provided in the moderator's reports that have been written to ensure that in future the marks awarded are in line with the specification criteria.

Page limits appeared to have been adhered to but it would be beneficial if candidates could include the word count at the end of the NEA 1 work.

Overall, it appeared that many centres were more familiar with the specification criteria and mark scheme this year and much of the work submitted was an improvement on last years. It is hoped that this will continue in future years.

#### **Comments on individual questions/sections**

#### NEA 1 – both available tasks were popular among learners.

#### **Research and investigation**

Research was presented in the majority of the candidates' work. There seemed to be less work copied and pasted this year and many candidates were clear in their research and were able to summarise their findings accordingly. Summarising findings in the research section is important to help enable candidates to adhere to the 2000-2500 word limit. It is also important for candidates to analyse their research as this should provide them with a focus to be able to choose their variables for their practical experimentation.

Some of the work seen included diagrams specifically linked to the task which was pleasing to see and enhanced the research sections. For example, in the Gelatine task, diagrams were included showing how the protein molecules set in jelly or how they are 'chopped up' by certain fruits. In the Fats task, some higher ability candidates had included diagrams demonstrating the hydrogenation of fats. When diagrams are included, candidates must include a reference to where they have sourced their images from.

There was still some research seen that appeared to be teacher led, but these instances were fewer than last year. Lower ability candidates may benefit from this exercise but it may hinder middle and higher range candidates.

The Gelatine task was well researched on the whole, but some candidates missed opportunities. Different types of gelatine could have been researched; candidates' who did this were able to further expand their knowledge of the products available and alternatives. Different fruits were researched and most candidates were able to discuss the scientific reasons why some fruits affect the setting of jelly. Much of the work seen did not include the characteristics of jelly; this should have been included so that candidates understood how a set jelly should be and then be able to use this information to compare their experimental jellies.

For the Fats task, a range of fats had been researched and a minority of pupils had been rather adventurous with some of the fats they had researched. Many candidates had discussed the characteristics of cakes made using the creaming method, but the characteristics of the products to be made in each task is something that needs to be seen more regularly in future cohorts work. To cover the science aspect of the research, candidates could have researched the process of hydrogenation of fats in the production of some of the fats researched. This was an area that was not seen in many of the folders. There was also opportunity to discuss the science involved in the creaming method of cake making and the functional properties of fats. Some candidates were able to include this in their work.

Plans of action, with recipes and methods, were included in many candidates' work. Variables were provided in most of the work and there was more justification of choice provided in this years' work, but there are still many candidates' who are failing to include this in their folders. The justification of choice of variables for the practical experimentation enables candidates to demonstrate their knowledge and understanding gained from their research. The majority of candidates were able to provide a hypothesis, but some, particularly in the Gelatine task, were too broad. Predictions need to be specific enough to enable candidates to clearly identify which variable they think will be the best and why they think this.

## Practical

A range of practical work had been undertaken. For the Gelatine task, candidates had used a wide range of variables due to the many ways of buying fruits e.g. fresh, tinned, dried, frozen and juiced. For the Fats task, many candidates had used between four and six different fats which was sufficient to gather a range of results. Photographic evidence was provided and the majority was clear and in colour. More annotation of the photographs was evident this year. It was pleasing to see that a range of formats had been used to present results and many candidates had used a number of the following methods; star profiles, bar charts, peer preference tests and hedonic ranking charts. By including a range of formats to present results it allows candidates more opportunity to access the higher mark bands.

For the Gelatine task, the experimental work could have looked at using fruits that affected the setting of jelly, such as pineapple, kiwi and papaya, and using some fruits that did not to enable a comparison. Some candidates had made modifications during their experiments such as seeing the effect cooking the kiwi, pineapple and papaya had on the setting of fruit. This was pleasing to see and demonstrated that candidates were modifying their thought process as they were completing their experiments. Some candidates had also used a range of fruits to see the results as a first experiment, and then completed a second set of experiments looking at different versions of the same fruit e.g. tinned, juiced, dried, frozen and fresh pineapple. Visual analysis, placing spoons on the jelly and viscosity charts were used to see if the jellies had set. In some of the work seen, candidates had not made a control jelly; this should have been done to ensure that a standard outcome was available to compare the variables to.

In the Fats task, the candidates could have looked at using different butters and margarines, but also alternative options such as goose fat, lard and avocados to name a few. Candidates could have recorded the differences in time taken to cream their chosen fats and sugar, colour of the creamed mixture before and after cooking, volume of the creamed mixture, texture and how much the cakes had risen after baking.

As well as a range of formats included to present the results of the practical experimentation, there was also more annotation and discussion of results included in the work this year. This is something that should continue to be seen in the folders in future years.

Some of the marks awarded for the practical section of this assessment were generous; some candidates had clearly been awarded marks from the incorrect band. When marking the practical, the correct band of marks should be decided before then awarding a final mark.

### **Evaluation**

The evaluation section in this assessment is the area that middle and lower range candidates struggle to complete in detail. Many of the higher range candidates were able to discuss in detail their results and link their findings back to the research and investigation section and were also able to link the scientific principles involved to their practical outcomes. Some of the evaluations seen tended to be descriptive rather than analytical and this prevents some candidates from accessing the higher mark bands.

With regards to the Gelatine task, candidates could have discussed the reasons why some of their jellies did not set due to the enzymes present in the fruit. Had they chosen to cook certain fresh fruits during their practical session (e.g. pineapple, kiwi or papaya) or used pasteurised juices then they should have discussed the fact that the heating process destroys the enzymes that prevent jelly from setting.

For the Fats task, the evaluation should have included a discussion about the reasons why some of the fats did not cream very well and the differences in appearance, colour and texture of the creamed mixture and the final product. One of the main reason for these variations was to do with the water content of the fat used, but few candidates were able to discuss this in detail.

The evaluation section should have also included a detailed review of whether the hypothesis was proved or disproved, and a discussion on what the reasons were. This is an area that many candidates had failed to write about in sufficient detail. Further investigations should also be discussed in the evaluation section. For example, the candidates who completed the Gelatine task could have mentioned about looking at the use of different gelatines, cooking of fruits or using other fruits as suggestions for alternative or further experiments. For the Fats task, candidates could have mentioned about using some other fats that they had not already used, using different pieces of equipment to cream the fat and the sugar together or looking at using the fats in the other methods of cake making to see how they performed.

# NEA 2 – the French cuisine option was the most popular amongst candidates.

# **Research and investigation**

As was mentioned in last year's report, the research section should include both primary and secondary research. Some candidates are able to do this well and include a range of research, but there is still a lot of purely internet based research included in some of the work seen. Questionnaires, restaurant visits, interviews and product analysis are all suitable methods of primary research that can be included along with any internet based research. Practical trials were included in the majority of the work seen, accompanied by photographic evidence, but candidates are not covering all of the required specification criteria when evaluating their practical trials. Reference to nutrition, skill, cooking methods and sensory qualities needs to be included in the evaluative comments to justify the awarding of marks from the top band. Some centres had encouraged candidates to include recipes, methods and even time plans for the practical trials – these are not required and are not credit worthy. Candidates should have been encouraged to use their time more wisely ensuring they covered all the specification criteria.

Justification of choice of dishes was included in more of the work seen this year, but there were still some folders where not all the required specification points had been covered. This hinders the candidates' ability to gain the higher marks for this section. To help future cohorts, centres could encourage candidates to use sub-headings to ensure that all the necessary points are discussed.

Many of the time plans seen included three clear sections (mise-en-place, cooking and serving) but the mise-en-place and serving sections again lacked detail. The mise-en-place section should be where the candidates are preparing equipment, completing any preparation of fruit and veg, making doughs and any other task that is required prior to the cooking of the dishes. The cooking section was generally well detailed and many hygiene and safety points were included which not only aids the candidates during the practical session but also demonstrates their knowledge of matters such as key temperatures and food poisoning. Many of the serving sections seen were also lacking detail – simply stating 'serve dishes' is not sufficient. There should be points listed as to how the dishes are to be portioned, garnished and presented. Final washing up should also be included in the serving section.

Ingredients lists are still not always seen in the folders – these need to be included as separate lists for each dish or included throughout the time plan.

## Practical

It was pleasing to see that more centres had used the practical marksheet which is available in the resources section of the website. This sheet provides a breakdown of marks for each of the skills that are listed in Section B. The sheet also allows opportunity for comments to be added which can help the moderator see how and why the marks have been awarded. Thank you to those centres that used the sheet and it is hoped that more centres use them in the future.

Colour photographs were mainly provided and some of the photographic evidence was excellent and really showcased the candidates' final practical outcomes. There were still some centres that provided black and white and unclear photographs - this makes moderation of the practical work difficult, particularly if no teacher justification and annotation has been provided.

There were still some generous marks awarded for the practical session, mainly in the preparation and presentation sections. Some candidates were also awarded high marks yet had failed to provide any accompaniments with the dishes. Accompaniments can provide the opportunity many candidates' require to showcase additional skills and make the dishes look more like finished plates of food.

### **Evaluation**

The evaluation section is still an area that many candidates could include more detail in. The candidates who use sub-headings tend to cover the majority of the specification criteria, but more detail would have justified some of the marks awarded.

Some evaluations tended to be descriptive rather than analytical. Describing what happened during the candidates' practical session is not required and is not credit worthy; candidates' should be discouraged from doing this. Where skills are commented on, it is not sufficient to simply state the skills used; comments should be made on their suitability and how well they were executed.

#### Summary of key points

Centres appear to have become more confident with the mark schemes for both the assessments this year and more centres appear to have marked fairly and accurately. There are still some centres that are not and we would recommend attending CPD events in the autumn and using exemplar material available from the website.

The moderator report, which is available from the secure website on GCSE results day, is meant to provide teachers with support and guidance; please take time to read them and use them to support your delivery of the NEA's in future.

Please be reminded that the briefs change annually and are different to those undertaken in England (Eduqas); it is the centres responsibility to ensure that 'live' briefs are undertaken.

wjec-gcse-food-and-nutrition-report-summer-2019-e



WJEC 245 Western Avenue Cardiff CF5 2YX Tel No 029 2026 5000 Fax 029 2057 5994 E-mail: exams@wjec.co.uk website: www.wjec.co.uk