**OCR-set Assignment**

**Sample Assessment Material**

OCR Level 1/Level 2 Cambridge National in Sport Science Sample Set-Assignment

Unit R183: Nutrition and sports performance

This is a sample OCR-set assignment which should only be used for practice. This assignment**must not**be used for live assessment of students.

The live assignments will be available on our secure website, ‘Teach Cambridge'.

**The OCR administrative codes associated with this unit are:**

* unit entry code R183
* certification code J828

**The regulated qualification number associated with this unit is:**

603/7106/7

**Duration: Approximately 8 - 10 hours**

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# **Information for Teachers Using this Assignment**

You **must**:

* Make sure you are familiar with the Assessment Guidance relating to the tasks. This is with the unit content in Section 4 of the [Specification](https://www.ocr.org.uk/Images/610952-specification-cambridge-nationals-sport-science-j828.pdf).
* Make sure that you have read and understood **all** the rules and guidance provided in Section 6 of the [Specification](https://www.ocr.org.uk/Images/610952-specification-cambridge-nationals-sport-science-j828.pdf) **before** your students complete and you assess the set assignments.
* Make sure that completion and assessment fully adhere to the rules and guidance provided in Section 6 of the [Specification](https://www.ocr.org.uk/Images/610952-specification-cambridge-nationals-sport-science-j828.pdf).
* Provide students with the [Student guide to NEA assignments](https://www.ocr.org.uk/Images/620514-student-guide-to-nea-assignments.pdf) before they start the assignments.
* Allow students approximately 8 - 10 guided learning hours (GLH) to complete all tasks.

You **must not**:

* Change or modify this assignment in any way.

## Scenario for the assignment

Nutrition and sports performance

As part of your work placement at a local sports centre, you are going to assist a sports nutritionist in their role. Amir is attending the sports centre and has been appointed a fitness instructor and also has the option of seeing the sports nutritionist to evaluate his diet.

On occasions the fitness instructors will refer clients to the sports nutritionist if they feel that this will be beneficial for the client. In order to successfully assist the sports nutritionist in their role, you need to develop your knowledge of how nutrition affects sports performance and participation.

In order to complete this task, you will need to consider the sporting activity Amir is regularly participating in. You also need to consider how nutrition may alter before, during and after exercise in order to develop a personalised, balanced nutrition plan for Amir.

Amir’s Client profile:

|  |  |
| --- | --- |
| Name | Amir Stephens |
| Gender | Boy |
| Age Range | 18 – 20 |
| Height | 5 ft 6 inch (168 cm) |
| Weight | 9 st 6 lbs (59.9 kg) |
| Sporting Activity experience | Active - Between 60 and 150 minutes a week - A young local league hockey player on an Academy scholarship programme who is trying to increase muscle mass.His preferred training schedule includes elements of: * Aerobic activity - continuous training (running) - 3k run
* Anaerobic activity - interval training - 5m sprint x 5, 10m sprint x 3, 15m sprint x 2
* Strength-based activity - body weight circuit – Include press ups and mountain climbers
 |
| Aim of the Nutrition plan? | Increase muscle mass |

**Read through all of the tasks carefully, so that you know what you will need to do to complete this assignment.**

**Important:**

* You will need to refer to the marking criteria grid. Your teacher can explain the marking criteria if you need further clarification.
* You will need to draw upon relevant skills/knowledge/understanding from other units you have studied in this qualification.
* No templates have been provided for you to use; your teacher **should not** provide you with anything to complete. You are expected to structure your work for this assignment yourself.

## Your Tasks and Marking Grids

### Task 1 – The nutrients needed for a healthy, balanced nutrition plan

Topic Area 1 is assessed in this task.

In order to advise Amir about how nutrition can affect his sporting performance, you will need to ensure you have sufficient knowledge of the nutrients needed for a healthy, balanced diet.

Your task is to research and present your findings on what nutrients are and their food sources. You will need to include the role and characteristics of nutrients in a healthy, balanced lifestyle, and then apply this knowledge to Amir’s sporting activity (‘activity’).

You **must**:

* Research the characteristics of a balanced nutrition plan for Amir’s activity
* Outline the food sources of nutrients for Amir’s activity
* Explain the role of nutrients within a healthy, balanced nutrition plan for Amir’s activity.

You will present your findings to the sports nutritionist at your local sports centre.

The evidence for the task **must be** a written report.

Total marks for Task 1: 6 marks

**Task 1 Tips**

* Ensure you identify not only what each nutrient is, but also link to the particular food sources for Amir’s activity
* Ensure a variety of different food groups is explored
* Consider the variety of sources of nutrients and what their role is in a balanced, healthy eating plan for Amir’s activity.

**Topic Area 1: Nutrients needed for a healthy, balanced nutrition plan**

|  |  |  |
| --- | --- | --- |
| **MB1: 1-2 marks** | **MB2: 3-4 marks** | **MB3: 5-6 marks** |
| Provides a **limited** description of what nutrients are and their role within a healthy balanced diet for the client’s sporting activity.Gives a **limited range** of relevant examples of food sources of nutrients. | **Adequately** describes what nutrients are and their role within a healthy balanced diet for the client’s sporting activity.Gives a **range** of relevant examples of food sources of nutrients. | **Comprehensively** explainswhat nutrients are and their role within a healthy balanced diet for the client’s sporting activity.Gives a **wide range** of relevant examples of food sources of nutrients. |

If your work does not meet Mark Band 1 criteria, you will be awarded zero marks for this task.

### Task 2 – Identify the dietary requirements of various sporting activities

Topic Area 2 is assessed in this task.

The sports nutritionist requires you to consider nutrition before, during and after Amir’s activities below:

* Aerobic activity - continuous training (running) = 3k run
* Anaerobic activity - interval training = 5m sprint x 5, 10m sprint x 3, 15m sprint x 2
* Strength-based activity.- body weight circuit – Include press ups and mountain climbers

You should build upon the information you have gathered in Task 1 and apply this knowledge to the three different types of activity.

Your task is to highlight why dietary requirements vary for these different types of activities. You should consider what types of foods would be ideal and which ones to limit for each particular type of activity.

You **must**:

* For Amir’s sporting activity (‘activity’) for each activity type listed above
* Outline the dietary requirements for each activity:
	+ - An aerobic/endurance activity
		- An anaerobic/short Intense activity
		- A strength-based activity
* Explain how nutrition may alter before, during and after: Amir’s performance for each activity.

The evidence for the task **must be** a written report.

 Total marks for Task 2: 12 marks

**Task 2 Tips**

* Consider not only what types of foods would be ideal for that particular type of activity but also whether these foods would be most effective, before, during or after exercise
* Consider not only what types of foods should be limited for that particular type of activity but also whether it would be detrimental, before, during or after exercise.

**Topic Area 2: Applying differing dietary requirements to varying types of sporting activity**

|  |  |  |
| --- | --- | --- |
| **MB1: 1-4 marks** | **MB2: 5-8 marks** | **MB3: 9-12 marks** |
| **Briefly** outlines the importance of nutrition before, during and after exercise for each sporting activity.Outlines the **basic** nutritional requirements for each sporting activity. Matches different needs with different activities with **limited** accuracy.Outlines with **limited** accuracy,thefoods that are ideal and foods to limit for each sporting activity.**Limited** or no justification of why these foods are either ideal or to be limited. | **Adequately** explains the importance of nutrition before, during and after exercise for each sporting activity.Outlines **a range** of nutritional requirements for each sporting activity. Matches different needs with different activities with **some** accuracy.Explains with **some** accuracyfoods that are ideal and foods to limit for each sporting activity.**Some** justification of why these foods are either ideal or to be limited. | **Comprehensively** explains the importance of nutrition before, during and after exercise for each sporting activity.Outlines a **wide range** ofnutritional requirements for each sporting activity. Matches different needs with different activities **accurately**.**Comprehensively** explainswhysome foods are ideal and what foods to limit for each sporting activity.**Detailed** justification of why these foods are either ideal or to be limited. |

If your work does not meet Mark Band 1 criteria, you will be awarded zero marks for this task.

### Task 3 – Develop a balanced nutrition plan for a sporting activity

Topic Area 3 is assessed in this task.

One of the fitness instructors has referred Amir on to the sports nutritionist. The fitness programme they have been working on with Amir is having limited results and they think that his diet may be a factor in this. Amir has produced a food diary to give the nutritionist an illustration of his current diet:



The sports nutritionist wants to check that you can write plans prior to sharing them with Amir.

Your task is to create a two-week balanced nutrition plan for Amir. In addition to this, you will need to consider how you might evaluate the plan and measure against the set goals for Amir.

You **must**:

* Create a two-week nutrition plan to suit Amir and his activity
* Clarify the nutrition plan’s goals and how they will be measured to judge their effectiveness and adapted if necessary
* Using the goals set above, analyse the effectiveness of the plan and suggest areas to improve.

The evidence for the task **must be** your nutrition plan (original and adapted), which could be supported with annotations and/or written notes.

 Total marks for Task 3: 12 marks

**Task 3 Tips**

* Consider what foods the type of activity requires, applying understanding from previous tasks
* The two week nutrition plan should not consist of a one week nutrition plan being repeated.

**Topic Area 3: Developing a balanced nutrition plan for a selected sporting activity**

|  |  |  |
| --- | --- | --- |
| **MB1: 1-4 marks** | **MB2: 5-8 marks** | **MB3: 9-12 marks** |
| The plan meets **few** of the specific needs and requirements identified in the goals.Measurement of the impact of the nutrition plan is **brief**, with **limited** reflection on the client’s needs.Ideas for improvement are **basic** rather than specific to the sporting activity or individual.**Limited** or no justification for the ideas for improvement. | The plan meets **some** of the specific needs and requirements identified in the goals.Measurement of the impact of the nutrition plan is **adequate** and **some** of the client’s needs are reflected upon.Ideas for improvement are **partly** relevant and considered to the sporting activity or individual.**Some** justification of the ideas for improvement. | The plan meets **all** of the specific needs and requirements identified in the goals.Measurement of the impact of the nutrition plan is **comprehensive** and **most** of the client’s needs are reflected upon.Ideas for improvement are **specific** to the sporting activity or individual.**Detailed** justification of the ideas for improvement. |

If your work does not meet Mark Band 1 criteria, you will be awarded zero marks for this task.

### Task 4 – How nutritional behaviours can be managed to improve sports performance

Topic Area 4 is assessed in this task.

The fitness instructors at the centre have asked the sports nutritionist if they can provide some information for Amir to use. This should reference how nutrition can be managed for positive effects on performance. It also needs to explain the detrimental effects of a poor diet on sports performance.

Your task is to produce some information which can be made available to Amir at the centre. This should be about the effects of overeating, undereating and dehydration on performance for Amir’s sporting activity (activity).

You **must**:

* Discuss the effects of over-eating on sports performance, considering how nutrition can be managed for Amir’s activity
* Discuss the effects of under-eating on sports performance, considering how nutrition can be managed for Amir’s activity
* Discuss the effects of dehydration on sports performance, considering how nutrition can be managed for Amir’s activity.

The evidence for this task **must be** provided in the form of written report.

 Total marks for Task 4: 10 marks

**Task 4 Tips**

* Ensure you consider the positive and detrimental behaviours that occur in nutrition management
* Ensure you focus on the effects on sports performance of under-eating, over-eating and dehydration. This could include physical performance as well as the impact on concentration levels for Amir’s activity
* This task is not about how diet management can affect medical conditions.

**Topic Area 4: How nutritional behaviours can be managed to improve sports performance**

|  |  |  |
| --- | --- | --- |
| **MB1: 1-3 marks** | **MB2: 4-7 marks** | **MB3: 8-10 marks** |
| **Limited** discussion of the detrimental effects of overeating, under eating and dehydration, using **few** references to sports performance in your client’s activity. **Limited** discussion of how nutrition can be positively managed by overeating, under eating and dehydration, using **few** references to sports performance in your client’s activity. | **Adequately** discusses the detrimental effects of overeating, under eating and dehydration, using **some** references to sports performance in your client’sactivity.**Adequately** discusses how nutrition can be positively managed by overeating, under eating and dehydration, with **some** references to sports performance in your client’s activity. | Discusses in **detail** the detrimental effects of overeating, under eating and dehydration, with **clear and detailed** references to sports performance in your client’s activity.Discusses in **detail** how nutrition can be positively managed by overeating, under eating and dehydration, with **clear and detailed** references to sports performance in your client’s activity. |

If your work does not meet Mark Band 1 criteria, you will be awarded zero marks for this task.

## Marking Criteria Command Words

The tables below show the command words that will be used in the NEA Marking Criteria grids. They explain the type of evidence that you should expect to see to meet each command word.

**Mark Band (MB1) Words:**

|  |  |
| --- | --- |
|  **Command word** |  **Meaning** |
|  **Basic** | * Work includes the minimum required. It is a starting point but is simplistic and not developed.
* Understanding and skills are applied in a way that partly achieves the wanted or intended result, but it would not be useable without further input or work.
 |
|  **Brief/Briefly** | * Work includes a small number of relevant facts or concepts but lacks detail, contextualisation or examples.
 |
|  **Dependent** | * The student can perform a task when given regular assistance or help.
 |
|  **Few** | * Work produced is restricted or narrow. It includes less than half of the information or examples expected for a full response.
 |
|  **Hesitant(ly)** | * Slow, uncertain, reluctant.
 |
|  **Inconsistent(ly)** | * A level of performance which varies in quality over time.
 |
|  **Inefficient** | * Outputs are produced but with great expense or effort because of poor organisation or design and not making the best use of available resources.
 |
|  **Limited** | * Work produced is restricted in range or scope and includes only some of the information required. It evidences partial rather than full understanding.
* Work produced is a starting point rather than a developed process, concept or output.
 |
|  **Minimal** | * Includes very little in amount or quantity required.
 |
|  **Simple** | * Includes a small number of relevant parts, which are not related to each other.
 |
|  **Superficial** | * Work completed lacks depth and detail.
 |

**Mark Band (MB2) Words:**

|  |  |
| --- | --- |
|  **Command word** |  **Meaning** |
|  **Adequate(ly)** | * Work includes the appropriate number of relevant facts or concepts but does not include the full detail, contextualisation or examples.
 |
|  **Assisted** | * The student can perform a task with occasional assistance or help.
 |
|  **Part(ly)/Partial** | * To some extent but not completely.
* Work produced is inclusive in range and scope. It evidences a mainly developed application of understanding, performance or output needed.
* Work produced results in a process, concept or output that would be useable for its purpose.
 |
|  **Some** | * Work produced is inclusive but not fully comprehensive. It includes over half the information or examples expected for a full response.
 |
|  **Sound** | * Valid, logical, shows the student has secured most of the relevant understanding, but points or performance are not fully developed.
* Applies understanding and skills to produce the wanted or intended result in a way that would be useable.
 |

**Mark Band (MB3) Words:**

|  |  |
| --- | --- |
|  **Command word** |  **Meaning** |
|  **Accurate(ly)** | * Acting or performing with care and precision.
* Correct in all details.
 |
|  **All** | * Work produced is fully comprehensive and wide-ranging. It includes almost all, or all the information or examples expected for a full response.
 |
|  **Clear(ly)** | * Focused and accurately expressed, without ambiguity.
 |
|  **Complex** | * Includes many relevant parts, all of which relate to each other logically.
 |
|  **Comprehensive(ly)** | * The work produced is complete and includes everything required to show depth and breadth of understanding.
* Applies the understanding and skills needed to successfully produce the wanted or intended result in a way that would be fully fit-for-purpose.
 |
|  **Confident(ly)** | * Showing certainty over the information presented.
* Showing certainty in actions performed.
 |
|  **Consistent(ly)** | * A level of performance which does not vary in quality over time.
 |
|  **Critical** | * Objective analysis and evaluation in order to form: a judgement, evaluation of the evidence or effective trouble shooting/fault finding.
 |
|  **Detailed** | * Gives point by point consideration of all the key information.
 |
|  **Effective** | * Applies the skills required to the task and is successful in producing the desired or intended result.
* The work produced is effective in relation to a brief.
 |
|  **Efficient** | * Able to produce results or outputs with the minimum expense or effort, because of good organisation or design and making the best use of available resources.
 |
|  **Full(y)** | * Work produced is comprehensive in range and scope. It evidences a fully developed application of understanding, performance or output needed.
* Work produced results in a process, concept or output that would be fully fit-for-purpose.
 |
|  **Independent(ly)** | * The student can perform a task without assistance or reliance on others.
 |
|  **Justify/Justified** | * The reasons for doing something are explained in full.
 |
|  **Most(ly)** | * Includes nearly all of what is expected to be included.
 |
|  **Perceptive** | * Having or showing insight.
 |
|  **Specific** | * Evidence is tightly focused on the individual or activity in question, rather than general or generic.
 |
|  **Well developed** | * The student evidences skills that are mature and well-practised.
* The student evidences knowledge or awareness that demonstrate solid underpinning understanding of the situation.
 |
|  **Wide (ranging)** | * Includes many relevant details, examples or contexts; all of which are fully detailed, contextualised or exemplified.
 |