Scheme of work – R183 Nutrition and sports performance

## About this scheme of work

This qualification provides lots of flexibility, allowing you to find the best route to suit your centre’s needs.Our Curriculum planner shows you at a high level how you could teach the course over two or three years. Our schemes of work provide examples for how you could deliver each unit, integrating the knowledge and understanding learned in the externally assessed unit.

All schemes of work should provide an opportunity for integrating the knowledge and understanding learned from the externally assessed unit content alongside the NEA assessment content. This scheme of work provides one example for delivery of this unit. You may find that a different approach would work better in your centre. We have provided a blank template should you wish to create your own or adapt one of the approaches provided.

**Our redeveloped Cambridge National in Sport Science J828 is for first teaching from September 2022.**

You’ve given us lots of feedback on what you need from a scheme of work, so we’ve made sure this resource features:

* a **unit-specific** and **lesson by lesson** approach
* **simple** and **editable** Word format – or you can use our [blank template](https://www.ocr.org.uk/Images/639549-scheme-of-work-template.docx) to create your own version
* links to our [curriculum planner’s first model](https://www.ocr.org.uk/Images/619716-curriculum-planner.docx) which is one teacher teaching the qualification over two years, broken down into half terms
* each lesson’s **key words**
* **ideas** for teaching and learning with useful **links**
* some ‘warm up’ teaching ideas if you’re teaching over three years.



**Our redeveloped Cambridge Nationals can be tailored to suit your needs – so this scheme of work and the lesson ideas are only suggestions.**

## Units and guided learning hours

Here is a reminder of the four units. There are two mandatory and two optional units (you must complete one of the optionals) in the redeveloped Cambridge National in Sport Science.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit** | **Unit title** | **Guided learning hours (GLH)** | **How are they assessed?** | **Mandatory or optional?** |
| R180 | Reducing the risk of sports injuries and dealing with common medical conditions | 48 | External examination | Mandatory |
| R181 | Applying the principles of training: fitness and how it affects skill performance | 48 | Non-examined assessment | Mandatory |
| R182 | The body’s response to physical activity and how technology informs this | 24 | Non-examined assessment | Optional |
| **R183** | **Nutrition and sports performance** | **24** | **Non-examined assessment** | **Optional** |

## Assumptions

* You will adapt the SOW and lesson content to match your own timetabling arrangements and will choose how to spread the 24 GLH over the two years as best fits your needs. We have worked on the basis that the average lesson time is around 45 minutes.
* Students can access some resources outside of lessons for any online homework or extension tasks.
* You will refer to the [specification](https://www.ocr.org.uk/qualifications/cambridge-nationals/sport-science-level-1-2-j828/) as the key document for detailed insight into the qualification’s content and assessment requirements.

## **Summary of software/other equipment in this scheme of work**

* General sports equipment, i.e. tennis balls
* Interactive whiteboard
* Recording equipment
* Digital camera
* Microsoft PowerPoint and Word
* Whiteboards and whiteboard pens

## First year of teaching

|  |  |
| --- | --- |
| Summer 2 | |
| **Summary of what you  will cover from the** [**curriculum planner:**](https://www.ocr.org.uk/Images/619716-curriculum-planner.docx) | **Topic Area 1: Nutrients needed for a healthy, balanced nutrition plan** |

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | TA1 Nutrients needed for a healthy, balanced nutrition plan  1.1 Characteristics of a balanced nutrition plan | You could begin this unit with an introduction to the context of the unit being linked heavily to various sporting scenarios and then the students will undertake a written assessment activity.  In this lesson you could:   * Explain to the students what a nutrition plan actually is. * Introduce the importance of meeting an individual’s nutritional needs. * Discuss the importance of foods from all the food groups. | Sports nutritionist  Nutrition plan  Training needs  Calorific needs | Describe some of the characteristics of a balanced nutrition plan | [Student book – R183 chapter](https://www.hoddereducation.co.uk/sport-pe?se=2373)  [Cambridge National in Sport Science books](https://www.cambridge.org/gb/education/subject/vocational/cambridge-national-sport-science)  (cambridge.org)  [Key Considerations for Creating a Nutrition Plan](http://www.issaonline.com/blog/index.cfm/2020/key-considerations-for-creating-a-nutrition-plan)  (issaonline.com)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slide 4 | R180  Students will learn about the foods that trigger medical conditions |
| 2 | TA1 Nutrients needed for a healthy, balanced nutrition plan  1.1 Characteristics of a balanced nutrition plan | In this lesson you could:   * Describe the importance of including all of the nutrients. * Explain why they should eat a variety of foods. * Explain the importance of including foods that suit the needs/tastes of the individual.   Students will learn about triggers of medical conditions in R180 so you could use that to complement this unit. | Nutrients  Medical needs  Cultural needs  Allergies  Food intolerance  Immune system | Describe some of the characteristics of a balanced nutrition plan | [Food allergy](http://www.nhs.uk/conditions/food-allergy/)  (nhs.uk)  [Food variety is important for our health – but the definition of a ‘balanced diet’ is often murky](https://theconversation.com/food-variety-is-important-for-our-health-but-the-definition-of-a-balanced-diet-is-often-murky-149126)  (theconversation.com)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slide 4 | R180  Students will learn about the foods that trigger medical conditions |
| 3 | TA1 Nutrients needed for a healthy, balanced nutrition plan  1.2 The role of nutrients in sports and their sources | In this lesson you could:   * Discuss the role of carbohydrates in sport and give some examples of sources. You will need to cover:  1. simple carbohydrates 2. complex carbohydrates.  * Present the role of fats in sport, with some examples of sources. You need to cover:  1. good fats 2. bad fats.  * Explain the role of proteins in sport, with some examples of sources.   Try to relate the nutrients to a variety of sporting activities. | Carbohydrates  Fats  Proteins  Food intolerance | Describe the role of carbohydrates, fats and proteins in sport and identify a range of sources | [Food types - the seven components of a balanced diet](https://www.bbc.co.uk/bitesize/guides/zgvsbk7/revision/2)  (bbc.co.uk)  Fats –  [Nutrients in food: fat](https://healthy-kids.com.au/food-nutrition/nutrients-in-food/fats/)  (healthy-kids.com.au)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 7-14, 16 |  |
| 4 | TA1 Nutrients needed for a healthy, balanced nutrition plan  1.2 The role of nutrients in sports and their sources  \* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course. | In this lesson you could:   * Discuss the sources of fibre in the diet and its role in sporting activities. * Stress the importance of drinking water during sport and the different sources of water. * Explain the role of vitamins and minerals in sporting activities and the sources of these.   Try to relate the nutrients to a variety of sporting activities. | Fibre  Water  Vitamins and minerals  Fruit and vegetables | Describe the role of fibre, water and vitamins and minerals, in sport and identify a range of sources | Fibre –  [How to get more fibre into your diet](http://www.nhs.uk/live-well/eat-well/how-to-get-more-fibre-into-your-diet/)  (nhs.uk)  Water, vitamins and minerals –  [What are the 6 essential nutrients?](http://www.medicalnewstoday.com/articles/326132#protein)  (medicalnewstoday.com)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 7-14, 16 |  |

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

## Second year of teaching

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Autumn 1 | | | | | | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://www.ocr.org.uk/Images/619716-curriculum-planner.docx)**:** | | **Topic Area 1: Nutrients needed for a healthy, balanced nutrition plan** | | | | |
| 5 | TA1 Nutrients needed for a healthy, balanced nutrition plan | In this lesson you could:   * Introduce the scenario for the assessment of this TA. * Describe the role of a sports nutritionist. * Explain the marking criteria for this assessment. * Allow students to research the characteristics of a balanced nutrition plan. * Students should apply these characteristics to the person outlined in the set assignment.   This is a controlled assessment so no formats should be given to students. | Characteristics  Nutrients  Sports nutritionist  Sources of nutrients | Explain what nutrients are and their role within a healthy balanced diet for the client’s sporting activity | Notes from class discussions and explanations.  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 4, 7-14, 16 | R180  Students will learn about the foods that trigger medical conditions |
| 6 | TA1 Nutrients needed for a healthy, balanced nutrition plan | In this lesson, you could:   * Allow students to research various sources of nutrients. * Allow students to link nutrients and their sources to the person outlined in the set assignment. * Allow students to research alternative sources of foods to meet individual needs.   This is a controlled assessment so no formats should be given to students. | Sources of food | Outline the food sources of nutrients for the person outlined in the set assignment’s activity | Notes from class discussions and explanations.  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 4, 7-14, 16 | R180  Students will learn about the foods that trigger medical conditions |

|  |  |
| --- | --- |
| **Summary of what you  will cover from the** [**curriculum planner**](https://www.ocr.org.uk/Images/619716-curriculum-planner.docx)**:** | **Topic Area 2: Applying differing dietary requirements to varying types of sporting activity** |

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | TA2 Applying differing dietary requirements to varying types of sporting activity  2.1 The dietary requirements of endurance/aerobic activities | In this lesson you could:   * Clarify what is meant by before, during and after an activity. * Describe, with examples, what endurance/aerobic activities are. * Stress the importance of hydration and carbohydrate loading before these types of activities. * Discuss how to maintain hydration and carbohydrate levels, during these types of activities. * Explain the benefits of rehydrating and replacing appropriate nutrients after these types of activities.   Try to use a range of endurance activities/conditions to help students understand the concepts. | Energy  Hydration  Aid recovery  Aerobic exercise  Half time/interval  Rehydrate  Appropriate nutrients | Describe the dietary needs of endurance/ aerobic activities | [Role of Nutrition In Sports](http://www.slideshare.net/JustForHearts/role-of-nutrition-in-sports)  (slideshare.net)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 19 and 21 | R180  Students are required to know the different dietary requirements in aerobic activities.  Students are required to know the role nutrients can play before, during and after aerobic activities. |
| 2 | TA2 Applying differing dietary requirements to varying types of sporting activity  2.2 The dietary requirements of short intense/anaerobic activities | In this lesson you could:   * Present the students with a range of short intense/anaerobic activities. * Describe the use of carbohydrates and proteins before taking part in short intense activities. * Explain how students can get foods that will give them energy and aid recovery, during these short intense activities. * Task students to find out why short intense activities require you to rehydrate and reload appropriate nutrients. Can they name any nutrients to be replaced? | HIIT training session  Glycogen  Anaerobic exercise  Lactic acid | Describe the dietary needs of short intense/ anaerobic activities | [The real-life diet of Usain Bolt](https://www.gq-magazine.co.uk/lifestyle/article/usain-bolt-diet)  (gq-magazine.co.uk)  [High intensity interval training (HIIT) energy tips](https://www.lifefitness.com/en-us/blog/high-intensity-interval-training-hiit-energy-tips)  (lifefitness.com)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 19 and 22 | R180  Students are required to know the different dietary requirements in anaerobic activities.  Students are required to know the role nutrients can play before, during and after anaerobic activities. |
| 3 | TA2 Applying differing dietary requirements to varying types of sporting activity  2.3 The dietary requirements of strength based activities  \* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course. | In this lesson you could:   * Task the students to find some examples of strength based activities. * Stress the importance of a plan high in protein and low in fat. Students can research this using the resources noted. * Discuss the refuelling of carbohydrates, fats and vitamins and minerals. * Recap to the students the reasons why you need to rehydrate and reload appropriate nutrients. Can they name any nutrients to be replaced during strength based activities? | Pre event extras  Muscles mass  Excess body fat | Describe the dietary needs of strength based activities | [Sample Lean Meal Plan for Weight Lifters](https://healthyeating.sfgate.com/sample-lean-meal-plan-weight-lifters-2516.html)  (healthyeating.sfgate.com)  [Nutrition guide: training](https://www.englandrugby.com/participation/playing/food-for-rugby/nutrition-guide/training)  (englandrugby.com)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 19 and 23 | R180  Students are required to know the different dietary requirements in strength based activities.  Students are required to know the role nutrients can play before, during and after strength based activities. |
| 4  \* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course. | TA2 Applying differing dietary requirements to varying types of sporting activity | In this lesson you could:   * Introduce the assessment task for TA2, which builds upon Task 1. * Explain any misconceptions with the activities provided. Do the students know what each activity is? * Make sure students know to consider the nutrition of the person outlined in the set assignment, before, during and after each type of activity. * Allow students to outline the dietary requirements for the person outlined in the set assignment, when taking part in an aerobic activity.   This is a controlled assessment so no formats should be given to students. | Aerobic  Anaerobic  Strength based | Explain the importance of nutrition before, during and after exercise for each sporting activity | Notes from class discussions and explanations.  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 19, 21, 22 and 23 |  |
| 5 | TA2 Applying differing dietary requirements to varying types of sporting activity  \* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course. | In this lesson you could:   * Allow students to outline the dietary requirements for the person outlined in the set assignment, when taking part in anaerobic activities. * Allow students to outline the dietary requirements for the person outlined in the set assignment, when taking part in strength based activities.   This is a controlled assessment so no formats should be given to students. | Aerobic  Anaerobic  Strength based | Outline a wide range of nutritional requirements for each sporting activity and match different needs with different activities | Notes from class discussions and explanations.  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 19, 21, 22 and 23 |  |
| 6 | TA2 Applying differing dietary requirements to varying types of sporting activity | In this lesson you could:   * Allow students to explain how the nutrition of the person outlined in the set assignment may alter before, during and after their performance in each activity.   This is a controlled assessment so no formats should be given to students. | Aerobic  Anaerobic  Strength based | Explainwhysome foods are ideal and what foods to limit for each sporting activity | Notes from class discussions and explanations.  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 19, 21, 22 and 23 |  |

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

|  |  |
| --- | --- |
| Autumn 2 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://www.ocr.org.uk/Images/619716-curriculum-planner.docx)**:** | **Topic Area 3: Developing a balanced nutrition plan for a selected sporting activity** |

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | TA3 Developing a balanced nutrition plan for a selected sporting activity  3.1 How to design and develop a balanced nutrition plan | In this lesson you could:   * Introduce the new TA. Outline to the students what it is going to look like. * Explain how students could gather details about a current nutrition plan**.** * Task the student with taking a PAR-Q. Ask them what questions they would add to make it more relevant. * Present to the students how they may adapt a nutrition plan by looking at:  1. relevant nutrients 2. meal timings 3. portion sizes 4. amounts of meals.  * Set homework for them to write down a week’s nutrition plan for someone they know. | Age range  Budget  Cooking skill  Chronic conditions  Bloated | Describe how to gather details about a performer’s nutritional information | [Online PAR-Q Creator](https://www.fitsw.com/onlinePARQ/)  (fitsw.com)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 33 and 34 | R180  Students are required to gather details about a current nutrition plan and any issues such as medical conditions that may impact the design of future nutrition plans. |
| 2 | TA3 Developing a balanced nutrition plan for a selected sporting activity  3.1 How to design and develop a balanced nutrition plan | In this lesson, you could:   * Recap on how to adapt a nutrition plan. * Give the students an exemplar meal plan (there is one in the resources box). This will need to be linked to a different activity. * As a class, identify areas to be adapted. Can the students find one change to make for each of:  1. add or remove nutrients 2. change timings 3. portion sizes 4. amount of meals.  * Using the completed homework, task the students with highlighting any areas that need adapting. You may need to give them some guidance on this. | Vegan  Nauseous  Protein shakes |  | [MMA Meal Planning](http://www.bodybuilding.com/fun/free_mma_meal_plan.htm)  (bodybuilding.com)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slide 34 |  |
| 3 | TA3 Developing a balanced nutrition plan for a selected sporting activity  3.2 Key factors when considering the success/ impact of a nutrition plan  \* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course. | In this lesson you could:   * Present to the students the nutritional changes that could be made on the given nutrition plan. Give a range of activities and how the changes may differ. * Discuss the suitability and organisation of the given nutrition plan from the previous lesson. * Explain how the students could review the success or impact of a nutritional plan. Relate this to training and performance. You may want to use some data related to fitness testing for this.   Try to use a range of activities to show the difference in adaptations the students could make. | Portion sizes  Change timings  Amount of meals  Nutritional changes | Explain the key factors when considering the success/ impact of a nutrition plan | Meal ideas for a footballer –  [How to lunch like a football player](https://www.bbcgoodfood.com/howto/guide/how-lunch-football-player)  (bbcgoodfood.com)  Meal ideas for a gymnast –  [Diet in a day: Max Whitlock](http://www.menshealth.com/uk/nutrition/a757272/diet-in-a-day-max-whitlock/)  (menshealth.com)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 35 and 36 | R181  Students will need to learn about reviewing performance using normative data. |
| 4 | TA3 Developing a balanced nutrition plan for a selected sporting activity  \* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course. | In this lesson you could:   * Introduce the assessment task for TA3. * Dispel any misconceptions that arise. * Allow the students to view and begin to identify areas to adapt the current nutrition plans for the person outlined in the set assignment. * Allow students to clarify the goals of the nutrition plan; they may need to refer to TA1 and TA2 for this. * Allow students to create a two-week nutrition plan that meets the requirements of the person outlined in the set assignment. | Effectiveness  Goals |  | [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 33, 34, 35 and 36 | R180  Students are required to gather details about a current nutrition plan and any issues such as medical conditions that may impact the design of future nutrition plans. |
| 5 | TA3 Developing a balanced nutrition plan for a selected sporting activity | In this lesson you could:   * Allow students to compare the two plans in the resources. Ask them to spot the differences. * Allow student to continue to complete their two-week nutrition plan. * Allow students to explain their specific ideas for improvement within the nutrition plan. | Specific  Improvement |  | [Marathon meal plan](https://www.bbcgoodfood.com/howto/guide/marathon-meal-plans)  (bbcgoodfood.com)  [A 7-Day, 1200-Calorie Meal Plan](https://www.goodhousekeeping.com/health/diet-nutrition/g4351/1200-calorie-diet-plan/)  (goodhousekeeping.com)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 33, 34, 35 and 36 | R180  Students are required to gather details about a current nutrition plan and any issues such as medical conditions that may impact the design of future nutrition plans. |
| 6 | TA3 Developing a balanced nutrition plan for a selected sporting activity | In this lesson you could:   * Allow students to measure the impact of the adapted nutrition plan. They may need to refer to data for this. * Allow students to justify their ideas for improvement. | Justification  Impact  Data |  | [Performance Evaluation Tests](https://www.brianmac.co.uk/eval.htm)  (brianmac.co.uk)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 33, 34, 35 and 36 | R180  Students are required to gather details about a current nutrition plan and any issues such as medical conditions that may impact the design of future nutrition plans. |

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

|  |  |
| --- | --- |
| Spring 1 | |
| **Summary of what you  will cover from the** [**curriculum planner**](https://www.ocr.org.uk/Images/619716-curriculum-planner.docx)**:** | **Topic Area 4: How nutritional behaviours can be managed to improve sports performance** |

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

| Lesson no. | Topic areas/sub topic areas | Lesson ideas and activities | Lesson key words | Lesson outcome(s)  At the end of the lesson, students will be able to: | Useful links/resources | How does this link to other units? |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | TA4 How nutritional behaviours can be managed to improve sports performance  4.1 The effects of overeating on sports performance | In this lesson you could:   * Introduce the new TA and explain what it will be like. * Present to the students the effects of overeating on sports performance. Focus on:  1. How overeating affects the components of fitness from R181. Task the students with producing a poster of the effects. 2. Explaining clearly how overeating can be manipulated for selected sports. 3. Discuss the advantages and disadvantages of increasing the amount of nutrients. 4. Using examples in the resources, task the students with identifying any performance benefits of overeating. | Nutritional behaviour  Manipulated  Components of fitness –  Speed  Agility  Flexibility  Stamina  Muscle mass | Explain the effects of overeating on sports performance | Rugby tackles –  [Biggest Rugby Hits- Brutal Rugby hits](http://www.youtube.com/watch?v=d6bKrs6gbWk)  (4min 4sec video)  Sumo wrestlers –  [Sumo Wrestling 101 | National Geographic](http://www.youtube.com/watch?v=Cj_QyxPZE8M)  (2min 6sec video)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slide 28 | R180  Students are required to know about the effects of overeating. |
| 2 | TA4 How nutritional behaviours can be managed to improve sports performance  4.1 The effects of undereating on sports performance | In this lesson you could:   * Present the effects of undereating on sports performance. Focus on: * the effect on energy levels * the effect on concentration. * Task the students with making a drawing of a performer who undereats. What might they be saying? Is it different for different types of activity? * How undereating can be manipulated to manage weight. This is a sensitive subject so make sure you emphasise that manipulation is done under strict guidance from a sports nutritionist. Use the resource to explain to the students how weight can be managed. | Concentration  Weight categories  Optimum performance weight | Explain the effects of undereating on sports performance | [How Boxers Lose Weight Fast for a Fight](http://www.livestrong.com/article/278850-how-boxers-lose-weight-fast-for-a-fight/)  (livestrong.com)  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slide 29 | R180  Students are required to know about the effects of undereating. |
| 3 | TA4 How nutritional behaviours can be managed to improve sports performance  4.2 The effects of undereating of dehydration on performance | In this lesson you could:   * Discuss the effects of dehydration. Focus on:  1. Overheating. 2. The effect on performance levels. 3. How it can reduce the bloated feeling. 4. How it can reduce water retention.  * Task the students with writing four paragraphs on the effects of dehydration. Ask them to compare two varying sporting activities, i.e. marathon in hot conditions vs a sprinter. | Dehydration  Overheating  Cramp  Poor decision making  Heat stroke  Headaches | Explain the effect of dehydration on sports performance | [8 tips to avoid dehydration leading into training as an athlete](http://www.nswis.com.au/nutrition/8-tips-to-avoid-dehydration-leading-into-training-as-an-athlete/)  (nswis.com.au)  [What Happens To Your Body When You're Dehydrated?](https://www.youtube.com/watch?v=AujXYEabz3U)  (4min 41sec video) | R180  Students are required to know about the effects of dehydration. |
| 4 | TA4 How nutritional behaviours can be managed to improve sports performance | In this lesson you could:   * Introduce the assessment task for TA4. This builds on the assessment tasks for TA1, 2 and 3. * Dispel any misconceptions that arise. * Allow the students to present information on the effects of overeating on the person outlined in the set assignment. * Allow the students to discuss the detrimental effects of undereating. * Also allow the students to describe how the person outlined in the set assignment can manage their nutrition in terms of overeating. | Managed  Detrimental  Poor diet | Discuss how overeating behaviour can be managed to improve sports performance | Notes from class discussions and explanations.  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 28 and 29 | R180  Students are required to know about the effects of overeating. |
| 5 | TA4 How nutritional behaviours can be managed to improve sports performance  \* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course. | In this lesson you could:   * Dispel any misconceptions that have arisen. * Allow the students to present information on the effects of undereating on the person outlined in the set assignment. * Allow the students to discuss the detrimental effects of undereating. * Also allow the students to describe how the person outlined in the set assignment can manage their nutrition in terms of undereating. |  | Discuss how undereating behaviour can be managed to improve sports performance | Notes from class discussions and explanations.  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 28 and 29 | R180  Students are required to know about the effects of undereating. |
| 6 | TA4 How nutritional behaviours can be managed to improve sports performance | In this lesson you could   * Dispel any misconceptions that have arisen. * Allow the students to present information on the effects of dehydration on the person outlined in the set assignment. * Allow the students to discuss the detrimental effects of dehydration. * Also allow the students to describe how the person outlined in the set assignment can manage their nutrition in terms of undereating. |  | Discuss how dehydration can be managed to improve sports performance | Notes from class discussions and explanations.  [OCR Topic exploration pack\*](https://www.ocr.org.uk/Images/580431-r045-sports-nutrition.pptx)  Slides 28 and 29 | R180  Students are required to know about the effects of dehydration. |

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

\* Please note, this resource is for the current specification but is also relevant for this specification. Resources will be updated for J828 in due course.

## Teaching over three years

Some centres may choose to start their delivery of the qualification earlier in Year 9, and so deliver over three years. The following topic areas are suggestions of what could form part of early delivery.

| Topic area | Warm up/introductory activities | Length of time activity may take |
| --- | --- | --- |
| TA1  Nutrients needed for a healthy, balanced nutrition plan | Shopping list  The students could be given a variety of sports performers. They could perform a mock interview with these sports performers or students (if appropriate) may interview each other, to find out the characteristics that they need to consider. In order to do this, they will need to design a questionnaire to get all the information they need.  The students should then use this to create a weekly shopping list for two contrasting performers. The shopping list should include all of the nutrients but in amounts that reflect the sporting activities that each performer takes part in. It should also take into account any medical conditions or allergies as well as taste preferences for each performer.  The students could then present their shopping lists to the class, justifying their choice of foods. Additionally, if appropriate, the students in the audience could offer suggestions or ask questions based on the information in the presentation. | 3-4 hours with additional time given over to interviews in lessons. |
| TA2  Applying differing dietary requirements to varying types of sporting activity | Newspaper articles/blog/video  The students can choose three different sporting activities. There must be an activity from each of 1. Aerobic activities, 2. Anaerobic activities and 3. Strength based activities. The students should then choose a performer from each of their activities.  Their task is to then write/record a newspaper article/blog/video, based around the dietary needs of each of their sporting activities/performers. Each activity must include a before, during and after section as well as recommended foods for each performer and when to eat these in relation to a game/event. The students may also want to include alternatives for example, for those who follow particular diets on religious grounds, those with allergies, and vegans and vegetarians.  The students will need time to research some of these performers and the alternative foods so should include some personal information about each performer, such as age, location, level of performance (elite, amateur, Olympics). | 4-5 hours with additional time for practice of recorded blogs/videos. |
| TA3  Developing a balanced nutrition plan for a selected sporting activity | Switch  You can give the students three differing types of sports performer. These could be: rugby player, marathon runner and Joe Wicks (HIIT training session). The students may need time to research these activities. The students should then write a two-week nutrition plan for each of them, ensuring that it meets their needs in terms of the activity they take part in.  You can then challenge the students to adapt these two-week nutrition plans to suit a different kind of sports activity. Here is an example of how they could switch: rugby player to sumo wrestler, marathon runner to footballer/netball player and Joe Wicks (HIIT training session) to a 100m sprinter.  To further this, you could get the students to perform a role play in pairs. Each person takes on a role of a sports performer and then discusses how their nutrition plan would change as they change sporting activities. | 5-6 hours with additional time given to perform the pairs activity. |
| TA4  How nutritional behaviours can be managed to improve sports performance | Who wins?  You can give the students three differing sports performers. These can be anyone or specific performers relevant to your class. They are going to take part in three imaginary games/bout/events. The events could be:   1. A female flyweight boxing bout (students may need to research the weight category). 2. A weightlifting competition. 3. A gymnastic floor routine (they may need to watch a video of this).   The students should decide who they think would win each of the three events and record this.  However, you can then reveal the twist. One of the performers is overeating, one is undereating and the other is dehydrated. The students should then spend time researching and gathering information on the effects on each performer. The students should then use this information to revisit their original predictions. They should be able to justify their predictions.  To further this, they should make suggestions on how each of the performers could do better in each game/event/bout if they were to take part again in the future. | 4-5 hours with additional time for research and if you want students to present their predictions. |



We’d like to know your view on the resources we produce. Click [‘Like’](mailto:resources.feedback@ocr.org.uk?subject=I%20like%20the%20Cambridge%20National%20in%20Sport%20Science%20R183%20Scheme%20of%20work) or [‘Dislike’](mailto:resources.feedback@ocr.org.uk?subject=I%20dislike%20the%20Cambridge%20National%20in%20Sport%20Science%20R183%20Scheme%20of%20work) to send us an auto generated email about this resource. Add comments if you want to. Let us know how we can improve this resource or what else you need. Your email will not be used or shared for any marketing purposes.

Looking for another resource? There is now a quick and easy search [tool to help find free resources](https://www.ocr.org.uk/qualifications/resource-finder/) for your qualification.

OCR is part of Cambridge University Press & Assessment, which is itself a department of the University of Cambridge.

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored.   
Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office   
The Triangle Building, Shaftesbury Road, Cambridge, CB2 8EA. Registered company number 3484466. OCR is an exempt charity.

OCR operates academic and vocational qualifications regulated by Ofqual, Qualifications Wales and CCEA as listed in their qualifications’ registers including A Levels, GCSEs, Cambridge Technicals and Cambridge Nationals.

OCR provides resources to help you deliver our qualifications. These resources do not represent any particular teaching method we expect you to use. We update our resources regularly and aim to make sure content is accurate but please check the OCR website so that you have the most up to date version. OCR cannot be held responsible for any errors or omissions in these resources.

Though we make every effort to check our resources, there may be contradictions between published support and the specification, so it is important that you always use information in the latest specification. We indicate any specification changes within the document itself, change the version number and provide a summary of the changes. If you do notice a discrepancy between the specification and a resource, please [contact us](mailto:resources.feedback@ocr.org.uk).

© OCR 2022 - You can copy and distribute this resource freely if you keep the OCR logo and this small print intact and you acknowledge OCR as the originator of the resource.

Whether you already offer OCR qualifications, are new to OCR or are thinking about switching, you can request more information using our [Expression of Interest form](https://www.ocr.org.uk/qualifications/expression-of-interest/).

Please [get in touch](mailto:resources.feedback@ocr.org.uk) if you want to discuss the accessibility of resources we offer to support you in delivering our qualifications.

Please note – web links are correct at date of publication but other websites may change over time. If you have any problems with a link you may want to navigate to that organisation’s website for a direct search.