

<b>Unit title</b>	Sport Nutrition
<b>Unit level</b>	Three
<b>Unit credit value</b>	6
<b>Unit code</b>	WNI840
<b>Unit type</b>	Academic Subject Content
<b>Unit review date</b>	31/12/2028
<b>Graded/Ungraded</b>	Graded

**This unit has 4 learning outcomes:**

LEARNING OUTCOMES	ASSESSMENT CRITERIA
<b>The learner will:</b>	<b>The learner can:</b>
1. Understand the concepts of nutrition and digestion.	1.1 Explain food groups, including nutritional requirements and principles of a balanced diet.  1.2 Describe the structure and function of the digestive system in terms of: (a) digestion (b) absorption (c) excretion
2. Know about energy intake and expenditure in sports performance.	2.1 Discuss energy intake and expenditure in sports performance.  2.2 Describe energy balance and its importance in relation to sports performance.
3. Understand the relationship between hydration and sports performance.	3.1 Explain hydration and its effects on sports performance.
4. Be able to create a nutritional plan for a sporting activity.	4.1 Plan an appropriate two-week nutritional plan for a selected sports performer for a selected sporting activity.

## Assessment (Graded)

1. Meets assessment criteria	At least a Pass
2. Further grading	
<ul style="list-style-type: none"> <li>▪ Meets assessment criteria but not merit grading standards</li> </ul>	Pass
<ul style="list-style-type: none"> <li>▪ Meets assessment criteria and merit but not distinction grading standards</li> </ul>	Merit
<ul style="list-style-type: none"> <li>▪ Meets assessment criteria and distinction grading standards</li> </ul>	Distinction

## Indicative content

The following content is to be included in the delivery of the unit.

Learning outcomes	Indicative content
1 – Food groups	<ul style="list-style-type: none"> <li>macronutrients (carbohydrates, proteins, fats)</li> <li>fibre</li> <li>micronutrients (vitamins, minerals)</li> <li>nutritional requirements (essential and non-essential)</li> <li>common terminology (Recommended Daily Allowance, Optimum Level, Safe Intake, Estimated Average Requirements and their standard abbreviations – RDA, SI, EAR).</li> </ul>
1 – Balanced Diet	<p><b>Balance of food groups:</b></p> <ul style="list-style-type: none"> <li>grains</li> <li>fruit and vegetables</li> <li>protein</li> <li>dairy</li> <li>fats and sweets</li> <li>food pyramid</li> <li>Eatwell plate.</li> </ul> <p><b>Nutritional requirements for different groups</b></p> <ul style="list-style-type: none"> <li>children</li> <li>young people</li> <li>adults</li> <li>older people</li> <li>athletes</li> </ul> <p><b>Benefits of a balanced diet</b></p>

	<ul style="list-style-type: none"> <li>• weight maintenance.</li> <li>• reduced risk of chronic disease – type II diabetes, osteoporosis, coronary heart disease, cancer</li> </ul>
1 – Structure and function of the digestive system	<ul style="list-style-type: none"> <li>• buccal cavity</li> <li>• oesophagus</li> <li>• stomach</li> <li>• duodenum</li> <li>• pancreas</li> <li>• liver</li> <li>• gall bladder</li> <li>• small intestine</li> <li>• large intestine</li> <li>• kidneys</li> <li>• digestive juices and enzymes</li> </ul>
2 – Energy intake and expenditure	<p><b>Energy intake</b></p> <ul style="list-style-type: none"> <li>• units of measurement (e.g. calories, joules, kilocalories, kilojoules)</li> <li>• sources (e.g. fats, carbohydrates, proteins)</li> </ul> <p><b>Energy balance</b></p> <ul style="list-style-type: none"> <li>• basal metabolic rate (BMR) and factors affecting it (e.g. age, gender, fitness levels)</li> <li>• thermic effect of food</li> <li>• energy expenditure (e.g. energy expenditure = BMR x Physical Activity Level)</li> <li>• energy intake versus expenditure and how this affects weight.</li> <li>• Physical activity and calories used in different activities (intensity and length of time)</li> </ul>
3- Hydration	<ul style="list-style-type: none"> <li>• importance (e.g. everyday health and wellbeing)</li> <li>• effects of poor hydration habits (e.g. kidney health, Urinary Tract Infections (UTIs), loss of concentration, heat exhaustion)</li> <li>• signs and symptoms of:             <ul style="list-style-type: none"> <li>○ dehydration/hypohydration</li> <li>○ hyperhydration and hyponatremia</li> </ul> </li> <li>• dangers of extreme dehydration</li> <li>• types of fluid (e.g. isotonic, hypertonic, hypotonic)</li> </ul>
3 – Effects on sports performance	<ul style="list-style-type: none"> <li>• lowering of concentration levels</li> <li>• heat cramps, heat exhaustion, heat stroke</li> <li>• decrease in blood volume = increase in heart rate = decrease in stroke volume</li> </ul>

	<ul style="list-style-type: none"> <li>• increase in core temperature = increased cardiovascular strain</li> <li>• increased rate of glycogen degradation, elevated muscle temperature, increased levels of lactate</li> </ul>
4 – Nutritional Plan	<p>Nutritional strategies based on the demands of different sports</p> <p><b>Nutritional strategies:</b></p> <ul style="list-style-type: none"> <li>• carbohydrate/glycogen loading</li> <li>• increased protein intake</li> <li>• weight loss</li> <li>• weight gain.</li> </ul> <p><b>Nutritional intake during different phases of event</b></p> <ul style="list-style-type: none"> <li>• Phases of event:             <ul style="list-style-type: none"> <li>○ pre-event</li> <li>○ during event</li> <li>○ post-event.</li> </ul> </li> <li>• Types of food to be consumed during each phase.</li> <li>• Timings of food intake.</li> <li>• Fluid intake.</li> <li>• Supplements where appropriate</li> </ul>

## Indicative content

The following content is to be included in the assessment of the unit.

Learning outcomes	Indicative content
1 Understand the concepts of nutrition and digestion	<p>Learners must describe all food groups outlined in the indicative content, providing sources and RDA, using current dietary guidelines from at least one authoritative sources (e.g. NHS, Department of health).</p> <p>Learners must describe the nutritional requirements for at least two different groups from the indicative content and describe the benefits of a balanced diet.</p> <p>The learner must describe the functions of the digestive system (digestion, absorption, and excretion) including the structure and function of its various components</p>
3 Understand the relationship between hydration	<p>The learner must describe the importance of hydration, the effects and signs and symptoms of hydration/dehydration. The learner must describe all types of fluid in the indicative content and the</p>

and sports performance	function of each fluid. Additionally, the learner must describe the physiological effects of hydration on a performer's body, such as dehydration, hyperhydration, hypo-hydration, and super-hydration and the effects this can have on sports performance.
4 Be able to create a nutritional plan for a sporting activity	The learner must produce a 2-week dietary and hydration plan for a selected sports performer and activity. The plan must include information such as sports participated in, level of participation, training undertaken and the aims of the diet plan. The plan must also consider all food groups and be based around the chosen individual's activity.

### Assessment methodology

The following assessment methods are suggested for the assessment of this unit.

- Report
- Presentation
- Case Study
- Academic Poster
- Nutritional plan