

Developed in partnership with Mac-Nutrition

# 1st4sport Level 5 Diploma in Advanced Nutrition Science

Qualification Specification



## About Us

Welcome to 1st4sport, established in 2000, 1st4sport Qualifications are an industry specialist recognised awarding organisation regulated in England by the Office of the Qualifications and Examinations Regulator (Ofqual), in Wales by Qualifications Wales, and in Northern Ireland by the Council for the Curriculum, Examination and Assessment (CCEA) Regulation.

Serving the needs of the sport, physical activity and active leisure industry; our niche status is emphasised through our accomplished people, network of esteemed industry partnerships and our culture of excellence. We have an outstanding reputation; evidenced through the loyalty we receive from our trusted partners, recognised centres and most importantly our learners.

We have a proven track record; offering of valid, value-added, educational solutions and services and outstanding customer care. Our offer includes sector specific qualifications and pathways, and a range of relevant high-performing educational services; underpinned by leading digital solutions. The majority of these are developed and deployed in partnership with governing bodies of sport and other sector specific professional organisations. More than any other awarding organisation, our knowledge of the industry and our continuous cross-sector network enables us to understand the direction of our sector.

Our involvement in shaping our sector has been significant and we continue to be the awarding organisation that partner and representative organisations turn to for guidance on the direction of travel, as appropriate to the needs of our partners, centres, industry employers and learners.

**Our Mission:** To deliver excellent educational solutions and value-added services to sport, physical activity and the active leisure industry.

**Our Direction:** We aim to support the ongoing professionalisation of our industry; supporting employment, growth, sustainability and success. We embrace performance, participation and health agendas. Our objective is to continue to support our respected partners, providers and learners.

## Qualification Specification

Title:	1st4sport Level 5 Diploma in Advanced Nutrition Science
Qualification Overview:	Develops learners' theoretical knowledge and understanding of nutrition, giving them the knowledge, skills and confidence to support clients to achieve their goals.
Qualification Code:	23QNUTDIP5
Qualification Regulation Number:	610/2771/6
Guided Learning Hours (GLH):	150
Total Qualification Time (TQT):	424
Credit Value (if applicable):	Not applicable
Operational Start Date:	04/12/2023
Qualification Review Date:	31/05/2025
Learner Registration Period:	2 years
Qualification Objective:	This qualification qualifies learners to use their knowledge of nutrition alongside other strategies to support clients to achieve their goals.
Qualification Purpose:	Prepare for employment in a broad occupational area.

### Who is this qualification for?

Developed with employers such as MNU, the 1st4sport Level 5 Diploma in Advanced Nutrition Science is designed for sports and physical activity coaches, teachers, personal trainers, dietitians, sports and nutrition graduates, instructors, and those with a commitment in supporting healthier and sustainable lifestyle goals of clients and others. The qualification will be beneficial for those who are keen to offer nutrition guidance as an independent consultant or within their organisation. The qualification is also available to individuals to support their own lifestyle goals or who are seeking a career change. Applicants must hold a minimum of a level 3 qualification or equivalent within nutrition or sport science related subject that contains nutrition specific modules.

## Qualification Progression

With this qualification, learners can progress onto nutrition, health, sport, leisure and well-being qualifications in:

- nutritional counselling
- behaviour change
- health and fitness
- mental health and well-being
- sports performance.

They could also progress onto higher qualifications within their current environment, such as: coaching, teaching, or instructing in the sport and physical activity industry, or in the active leisure, learning, and well-being industry.

This qualification may lead to paid or voluntary roles providing nutritional advice and guidance to support healthier and sustainable lifestyle goals of clients and others within the sport and physical activity industry or the health, leisure and well-being industry.

## Entry Requirements

Learners must be a minimum of 18 years old at registration and 18 years old at certification.

## Pre-requisite(s) or other entry requirements

The recognised centre is required to conduct an initial assessment of learners to ensure that pre-requisites to registration and certification and any barriers that may disadvantage a learner under the Equality Act 2010 are considered and outcomes recorded during the application process.

Prior to registration learners are required to:

- be accurately identified
- be at least 18 years of age
- be able to undertake this assessment in English or Welsh (if available)

## Assessment Methods

The assessment methods used in this qualification are:

- Coursework (in 8 of 8 mandatory units)

## Grading Methods

This qualification will be graded Pass / Fail / Distinction.

## Qualification Structure

Learners must successfully complete all mandatory units to achieve this qualification.

### Mandatory Units

Unit ID	Unit Title	GLH
K/650/7392	Principles of evidence-based approaches and practices	15
L/650/7393	'Optimal' Health, Lifestyles and Diets	15
M/650/7394	Fundamentals of nutrition	18
R/650/7395	Systems within the human body	15
T/650/7396	Principles of nutritional support and advanced nutritional theory	20
Y/650/7397	Tools and techniques of nutritional practices	23
A/650/7398	Nutritional considerations for common clinical populations	29
D/650/7399	Performance nutrition programming	15

### Optional Units

There are no optional units in this qualification

### Pathway Units (where applicable)

There are no pathway units in this qualification

Unit Title	Principles of evidence-based approaches and practices
Unit Aim	To develop an understanding of the key terminology, concepts, methods and analysis of evidence-based approaches and practices, exploring different perspectives and be able to apply these to real-life client scenarios.
Unique Unit Number	K/650/7392
Unit Assessment Method(s)	Coursework
Assessment Specification	The learner will undertake a centre set case study exam, written exam and a multiple-choice exam. The achievable grades for this unit are Distinction, Pass and Fail. The assessment scores determine the grading as detailed in the additional qualification requirements at the end of this document. Reasonable Adjustments can be applied to these assessments in line with 1st4sport Policy Statement: Access Arrangements

### Learning Outcome: 1. Understand different methods of research

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
1.1 Identify types of research studies	The characteristics of different types of research	MCQs
1.2 Discuss the strength and weaknesses of different research methods	The strengths and weaknesses of the different type of research methods	written exam

### Learning Outcome: 2. Understand the principles of an evidence-based approach

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
2.1 Define evidence-based practice	What contributes to evidence-based practice Distinguish between evidence based and non-evidence-based information	MCQs
2.2 Distinguish between research and experience	"The difference between research and experience The definition of clinical reasoning	Written exam
2.3 Provide the benefits and challenges of an evidence-based approach	The benefits and challenges of evidence-based practice	Written exam

### Learning Outcome: 3. Be able to apply evidence-based approaches to real-life client scenarios

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
3.1 Critically evaluate nutritional concepts and claims	How to interpret, analyse and evaluate information, ideas, data and concepts relating to nutrition: i.e. high protein diets and renal function organic foods in the context of health and weight loss sweeteners in diet drinks and the relationship between low-calorie sweeteners, BMI, weight loss and diabetes gluten intake in the context of coeliac disease, health, and weight loss fasted cardio in the context of fat loss and muscle retention protein	Written exam
3.2 Select and apply appropriate research to inform client recommendations	How to select appropriate research to inform client recommendations How to apply research findings and data to real life scenarios to provide evidence-based recommendations	Task Based Assessment
3.3 Implement ways to reduce personal bias	How to demonstrate that bias has been minimised, and considered when providing evidence-based recommendations to clients	Task Based Assessment
3.4 Conduct academic referencing	How to carry out academic referencing within an essay	Task Based Assessment

Unit Title	'Optimal' Health, Lifestyles and Diets
Unit Aim	To develop a learners understanding of nutrition and how diet and lifestyle types can influence 'optimal' health and use this information to inform client recommendations.
Unique Unit Number	L/650/7393
Unit Assessment Method(s)	Coursework
Assessment Specification	The learner will undertake a centre set case study exam, written exam, and a multiple-choice exam. The achievable grades for this unit are Distinction, Pass and Fail. The assessment scores determine the grading as detailed in the additional qualification requirements at the end of this document. Reasonable Adjustments can be applied to these assessments in line with 1st4sport Policy Statement: Access Arrangements

### Learning Outcome: 1. Understand factors that can influence 'optimal' health

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
1.1 Define the term, 'optimal' health	The definition of 'optimal' health from different perspectives	MCQs
1.2 Discuss ways facets of health can influence overall health	The different facets of health and how they can impact a client's life	Written exam
1.3 Differentiate between 'nature' and 'nurture'	The difference between the two terms and ways they influence a client's health	MCQs
1.4 Compare the diets and health outcomes of people living in the blue zones with people from westernised countries	<p>The blue zones and their relevance in optimal health discussions</p> <p>The common traits, diets and health outcomes of people from the blue zones and 'Westernised' countries, i.e. UK</p>	Written exam

## Learning Outcome: 2. Understand how different diets can influence 'optimal' health

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
2.1 Discuss diet types and trends	Modern dietary patterns and the western diet  The 'If It Fits Your Macro's (IIFYM)' dietary approach  The difference between diets for correcting disease vs maintaining health	Written exam
2.2 Identify the health benefits and risks of diet types	The benefits and risks of different types of diets e.g. the potential nutritional consequences of vegan and vegetarian diets	MCQs

## Learning Outcome: 3. Understand the role of Nutrigenetics in relation to dietary recommendations

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
3.1 Define the term 'nutrigenetics'	The definition of nutrigenetics	MCQs
3.2 Describe the role of Nutrigenetics relating to the provision of dietary recommendations	Where the claims of creating a personalised plan which is based on genetics have evolved from and where the research is currently at	Written exam

## Learning Outcome: 4. Be able to recommend diets to support client's 'optimal' health

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
4.1 Assess a client's diet	Identifying areas for improvement within a client's diet	Task Based Assessment

## Learning Outcome: 5. Know dietary guidelines and recommendations

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
5.1 Provide dietary recommendations for various populations	Different dietary recommendations for a variety of populations: - Athletes - Young people - Women - Elderly	Task Based Assessment
5.2 Explain dietary recommendations for common medical conditions	Common medical conditions: - High cholesterol - Lactose intolerance - Gluten intolerance - Blood glucose control>	Written exam

## Learning Outcome: 6. Know ways hydration can influence health and performance

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
6.1 Discuss the role and functions of fluids within the human body	The role of fluids within the human body and their importance Functions of water within the human body What is total body water made up of	Task Based Assessment
6.2 Explain how fluid balance is regulated	How fluid balance is maintained and regulated The different electrolytes and how they impact hydration status What osmolality levels are and how this affects absorption	Written exam
6.3 Outline the relationship between hydration and body weight	The impact of total body water on body weight The impact of hydration status on weight loss	MCQs
6.4 Provide methods to monitor hydration	How to estimate sweat rate	Written exam
6.5 Identify factors that can influence monitoring hydration status	The factors affecting sweat rate The individual differences in sweat rates	MCQs
6.6 Discuss the effect of dehydration on health and performance	The physiological response to dehydration The symptoms of dehydration The impact of dehydration on health and performance outcomes The diuretic effects of alcohol and caffeine	Task Based Assessment

## Learning Outcome: 7. Be able to provide hydration recommendations based on the client

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
7.1 Provide hydration recommendations based on client needs	Practical recommendations to monitor and maintain hydration status The osmolality of sport drinks and their impact on performance The impact of different drinks on hydration status, using the beverage hydration index Rehydration strategies for athletes What is hyponatremia and what causes it	Task Based Assessment

## Learning Outcome: 8. Understand the impact of meal timing and frequency in relation to health and performance

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
8.1 Outline how the frequency of meals may influence a client's health and weight loss	The impact of meal frequency on metabolism The impact of meal frequency on hunger The impact of meal frequency on fat loss and body composition The impact of meal frequency on health	Written exam
8.2 Explain ways carbohydrate bunching can improve metabolic health	The concept of carbohydrate bunching The metabolic impact of carbohydrate bunching	Written exam
8.3 Discuss the health implications and practical considerations of shift work in relation to health and weight loss	The negative health consequences of shift work and circadian misalignment The practical application of chrononutrition strategies	Written exam
8.4 Identify the impact of breakfast on metabolic rate, appetite, cognition and weight loss	How breakfast consumption impacts health How breakfast impacts hunger and energy intake The role of breakfast in relation to cognitive function	MCQs

Unit Title	Fundamentals of nutrition
Unit Aim	To develop the learners understanding of the types and functions of biochemical reactions, macronutrients, micronutrients within the human body to support 'optimal' health and be able to conduct nutritional calculations to inform client recommendations.
Unique Unit Number	M/650/7394
Unit Assessment Method(s)	Coursework
Assessment Specification	The learner will undertake a centre set case study exam, written exam, and a multiple-choice exam. The achievable grades for this unit are Distinction, Pass and Fail. The assessment scores determine the grading as detailed in the additional qualification requirements at the end of this document. Reasonable Adjustments can be applied to these assessments in line with 1st4sport Policy Statement: Access Arrangements

### Learning Outcome: 1. Know the types and functions of biochemical reactions within the human body

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
1.1 >Identify types of biochemical reactions within the human body	The different chemical reactions within the human body	MCQs
1.2 Explain the functions of biochemical reactions within the human body	Which type of chemical reactions produce energy and which consume energy	Written exam

## Learning Outcome: 2. Know the types and functions of macronutrients

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
2.1 >Explain the functions of macronutrients within the human body	Functions of carbohydrates, protein and fats. The role of dietary fibre and resistance starch in gut health The role of fat and cholesterol in the human body	Task Based Assessment
2.2 Distinguish between protein types	Complete and incomplete proteins Different sources of protein (plant vs animal) and their impact on muscle protein synthesis and the adaptive response to exercise	MCQs
2.3 Analyse the benefits of protein for different populations	The health and performance benefits associated with adequate protein intake	Task Based Assessment
2.4 Outline protein requirements for different populations	The different protein requirements for different populations Identify requirements of protein for athletic population	Task Based Assessment
2.5 Identify the elements of carbohydrates	The chemical structure of carbohydrates	MCQs
2.6 Analyse the benefits of carbohydrates	The health and performance benefits associated with adequate carbohydrate intake	Task Based Assessment
2.7 Differentiate between glycaemic index and glycaemic load	The difference between glycaemic index and glycaemic load and their relevance in personalised nutrition	MCQs
2.8 Distinguish between types of fat	The different types of fat and their differential effects on health Essential and non-essential fatty acids	MCQs
2.9 Distinguish between types of amino acids	The difference between essential and non-essential amino acids The branched chain amino acids	MCQs

### Learning Outcome: 3. Understand macronutrient digestion, absorption and metabolism

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
3.1 Outline the biochemistry and structures of macronutrients	The biochemistry of different macronutrients The structure of different macronutrients	MCQs
3.2 Explain how macronutrients are digested, metabolised and absorbed within the human body	How protein, carbs and fat is digested and absorbed within the human body Protein, carbohydrate and fat metabolism and metabolic pathways	Written exam

### Learning Outcome: 4. Understand ways macronutrients can support optimal health

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
4.1 Outline the health benefits of macronutrients for specific populations	The benefits of protein within specific populations including older adults	Task Based Assessment
4.2 Describe ways protein can influence weight loss	The evidence surrounding the benefits of protein on weight loss and body composition e.g. appetite and muscle retention	Task Based Assessment

### Learning Outcome: 5. Know the types and functions of micronutrients

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
5.1 Identify types of micronutrients	What micronutrients are and the different types of micronutrients	MCQs
5.2 Explain the role and functions of micronutrients	The role and function of key micronutrients	Written exam
5.3 Identify how to measure a clients micronutrient status	How an individual's micronutrient status can be measured	MCQs
5.4 Identify symptoms and health conditions associated with micronutrient deficiencies	Common symptoms associated with micronutrient deficiencies Conditions that are associated with micronutrient deficiencies including rickets and scurvy When and how to refer a client if a micronutrient deficiency is suspected	MCQs

### Learning Outcome: 6. Know the types and functions of vitamins and minerals

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
6.1 Clarify types of vitamins and minerals	The different types of vitamins and minerals and how they are classified The antioxidant properties of certain vitamins	MCQs
6.2 Identify the guidelines and recommendations for vitamins and minerals	Vitamin and mineral Reference Nutrient Intakes (RNI)'s in line with public health guidelines	MCQs

### Learning Outcome: 7. Be able to carry out nutrient calculations

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
7.1 Carry out nutrient calculations	How to calculate the amount of the following within certain foods: - Protein - Carbohydrates - Fats How to convert salt (NaCl) to sodium (NA)	MCQs

## Learning Outcome: 8. Be able to give nutrient recommendations to clients based on their goals

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
8.1 Provide protein intake recommendations to meet client goals	Client-specific protein recommendations, relative to their profile, i.e. body weight, goals, dietary requirements, medical conditions, daily activities	Task Based Assessment
8.2 Provide fat intake recommendations to meet client goals	Fat requirements for clients based on their goal Goal-specific nutritional priorities for sports performance, weight loss and clinical clients How to prioritise macronutrients for different client goals	Task Based Assessment
8.3 Provide carbohydrate recommendations to meet client goals	Carbohydrate requirements for clients based on their goal	Task Based Assessment
8.4 Provide micronutrient recommendations	The differences in vitamin and mineral requirements for specific populations Micronutrient recommendations for different clients Provide micronutrient targets to clients	Task Based Assessment

Unit Title	Systems within the human body
Unit Aim	To develop a learners understanding of the roles and functions of key systems; digestive, endocrine and energy system and energy balances within the human body and be able to conduct calculations to inform recommendations to support 'optimal' health.
Unique Unit Number	R/650/7395
Unit Assessment Method(s)	Coursework
Assessment Specification	The learner will undertake a centre set case study exam, written exam, and a multiple-choice exam. The achievable grades for this unit are Distinction, Pass and Fail. The assessment scores determine the grading as detailed in the additional qualification requirements at the end of this document. Reasonable Adjustments can be applied to these assessments in line with 1st4sport Policy Statement: Access Arrangements

### Learning Outcome: 1. Understand the role of the digestive system within the human body

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
1.1 Describe the role of the digestive system within the human body	What the digestive system is The role of the digestive system within the human body	MCQs
1.2 Outline the functions of gastrointestinal tract organs	The role and functions of the digestive organs within the human body The functions of the stomach in the human body	Written exam
1.3 Identify the purpose of mastication	The purpose of mastication (chewing) in the digestive process	Written exam
1.4 Differentiate between digestive enzymes	The difference between the roles, types, where in the body digestive enzymes are produced and released Which substance stimulate the release of certain enzymes and what products are formed as a result	Written exam

### Learning Outcome: 2. Know how gastrointestinal issues can impact health

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
2.1 Identify factors that can influence gastrointestinal issues	>p>Nutritional factors that might worsen and improve the symptoms of gastroesophageal reflux	MCQs
2.2 Describe the role of nutrition within digestive health	How dietary patterns impact digestion and gastric emptying How healthy eating can minimise the risk of acid reflux, constipation, and diarrhoea How to work within an appropriate scope of practice in specific clinical situations involving the digestive system	Written exam

### Learning Outcome: 3. Know the components and roles of the endocrine system

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
3.1 Identify the glands and organs within the endocrine system	The organs and glands within the endocrine system Which organ produces/secretates hormones Which hormones are produced by the pituitary and adrenal glands	MCQs
3.2 Explain the role of hormones within the human body	The role of hormones produced by the endocrine system within the human body Which hormones suppress or increase appetite	Written exam
3.3 Describe factors that can impact hormone production	The impact of nutrition, exercise and sleep on hormones within the body	Written exam
3.4 Explain the role of Thyroid-stimulating Hormone (TSH) within the human body	What hypothyroidism is, the role of, and UK reference ranges for, Thyroid Stimulating Hormone (TSH)	MCQs>
3.5 Identify common symptoms of hypothyroidism	Symptoms of hypothyroidism	MCQs

### Learning Outcome: 4. Understand Energy Systems within the human body

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
4.1 Differentiate between energy systems	The different energy systems including: ATP-PC, Anaerobic and Aerobic	MCQs
4.2 Identify the by-products of energy systems	The different by-products of the energy systems	MCQs

## Learning Outcome: 5. Understand energy balance

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
5.1 Explain energy balance within the human body	The fundamentals of energy balance as a dynamic process e.g. Calories In vs Calories Out Identify the components of energy balance How energy balance impacts health and body composition	Written exam
5.2 Identify factors that influence the energy balance equation	What factors contribute to energy in and out within the energy balance equation The differences in the thermic effect of feeding (TEF) for different macronutrients	Task Based Assessment
5.3 Outline the structure of a human cell	The human cell and the role of the key components of the human cell	MCQs
5.4 Identify the structure of Adenosine triphosphate (ATP)	What ATP is made up of	MCQs
5.5 Differentiate between calories and kilojoules	The difference between Calories and Kilojoules and how to convert one to the other	MCQs
5.6 Explain pH levels within the human body	The regulation of pH within the human body Substances used to help regulate pH levels within the human body during exercise How pH levels are kept within range and regulated within the human body How exercise affects the pH levels of the human body i.e. muscle and blood pH	Written exam
5.7 Discuss substrate utilisation	Factors that can affect substrate utilization The impact of exercise intensity on substrate utilisation and RER	Written exam

## Learning Outcome: 6. Be able to use energy systems to support a client's health

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
6.1 Apply energy systems within client recommendations	The energy systems in relation to the individual client case studies	Task Based Assessment

## Learning Outcome: 7. Be able to conduct nutritional calculations to support a client's health

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
7.1 Conduct nutritional calculations	Equations include: Exercise energy expenditure (EEE) Basal metabolic rate (BMR) Total Daily Energy Expenditure (TDEE)	Task Based Assessment
7.2 Conduct calculations to estimate energy expenditure and recommend calorie targets for clients	How to calculate a client's BMR using predictive equations How to select an appropriate activity factor (PAL) for a specific client How to use metabolic equivalents (METs) to determine exercise energy expenditure (EEE)	Task Based Assessment
7.3 Conduct calculations to convert macronutrient intake to energy intake	How to convert macronutrient data to energy intake	Task Based Assessment

Unit Title	Principles of nutritional support and advanced nutritional theory
Unit Aim	This unit develops a learners understanding of advanced nutritional theory while developing learners skills to give nutritional recommendations to clients in order to support their health and performance goals.
Unique Unit Number	T/650/7396
Unit Assessment Method(s)	Coursework
Assessment Specification	The learner will undertake a centre set case study exam, written exam, and a multiple-choice exam. The achievable grades for this unit are Distinction, Pass and Fail. The assessment scores determine the grading as detailed in the additional qualification requirements at the end of this document. Reasonable Adjustments can be applied to these assessments in line with 1st4sport Policy Statement: Access Arrangements

### Learning Outcome: 1. Understand the hormonal and biochemical effects of dietary protein

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
1.1 Describe ways a high protein diet can influence weight loss and health	How a high protein carbohydrate diet can be effective for weight loss and health	Task Based Assessment
1.2 Summarise the role of protein within exercise and performance settings	Protein recommendations for different goals Protein recovery strategies Protein synthesis, its mechanisms and how it occurs in the body Signalling pathways and the role of mammalian target of rapamycin (mTOR) Whole body vs muscle protein turnover	Task Based Assessment

### Learning Outcome: 2. Understand the key hormonal and biochemical effects of dietary carbohydrate

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
2.1 Define the role of insulin	The physiological effects of insulin on substrate utilisation How the insulin response differs in relation to different foods The insulin hypothesis	MCQs
2.2 Explain ways sugar consumption can influence optimal health and weight	Sugar intake in relation to health and weight loss	Written exam
2.3 Describe ways a low carbohydrate diet can influence weight loss and health	How a low carbohydrate diet can be effective for weight loss and health De Novo lipogenesis (DNL) and the impact on the body	Task Based Assessment
2.4 Summarise the role of carbohydrates within exercise and performance settings	Carbohydrate recommendations for different intensities and durations of exercise Carbohydrate recovery strategies Carbohydrate periodisation and consequential physiological adaptations	Task Based Assessment

### Learning Outcome: 3. Understand the hormonal and biochemical effects of dietary fat

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
3.1 Identify the health benefits associated with certain sources of dietary fat	The potential effects of dairy fat, omega 3 and coconut oil consumption	Task Based Assessment
3.2 Explain how ketogenic diet impacts fat loss and health	What a ketogenic diet is The effect of a ketogenic diet on fat loss and health The benefits and limitations of ketogenic diets	Written exam
3.3 Describe the relationship between dietary fat and sports performance	The importance of fat adaptation for endurance performance The limitations of ketogenic diets and sports performance	Task Based Assessment
3.4 Explain calorie periodisation as a strategy for weight loss	The periodisation of Calories across the day/week/month to suit a client's preference and lifestyle How to create a calorie deficit daily/weekly	Task Based Assessment
3.5 Summarise the remit of a Nutritionist in relation to client diets	How to work within an appropriate scope of practice and when to refer to a dietitian/medical professional, with specific reference to the restrictive nature of diets such as the ketogenic diet	Task Based Assessment

## Learning Outcome: 4. Understand adherence in fat loss

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
4.1 Explain the role of Calories in relation to fat loss	The hierarchy of importance for fat loss The principles vs methods of fat loss	Task Based Assessment
4.2 Identify key factors that can be manipulated for fat loss	The factors that can be manipulated to when working with a fat loss client	Task Based Assessment
4.3 Summarise factors which may influence adherence	The physiological, psychological and social/environmental factors that may affect adherence to an energy deficit	Task Based Assessment
4.4 Identify the different types of client adherence and non-adherence	Different types of adherent/non-adherent clients and their characteristics How to monitor and reduce non-adherence	MCQs

## Learning Outcome: 5. Be able to adapt diets to meet clients' needs

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
5.1 Recognise if a client is psychologically and physiologically ready to diet	The factors that should be considered before working with a weight loss client What can they work on if weight loss is not appropriate at this time	Task Based Assessment
5.2 Compare flexible and rigid dieting	The characteristics of rigid and flexible dieting The concept of clean eating	MCQs
5.3 Compare and contrast tracking and non-tracking methods for dieting	The different types of tracking and non-tracking methods Advantages and disadvantages of tracking and non-tracking methods	Written exam
5.4 Select and apply non-tracking and tracking methods to clients	Which types of tracking and non-tracking methods are most suited to which clients	Task Based Assessment
5.5 Describe the nuances of food quality and quantity	The considerations of food quality and food quantity depending on a specific client goal	Task Based Assessment
5.6 Distinguish between coaching to live and coaching to diet	The multiphasic approaches to dieting and lifelong habits	Task Based Assessment

### Learning Outcome: 6. Understand rates of weight loss, diet breaks and metabolic adaptation

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
6.1 Compare and contrast rates of weight loss	The advantages and disadvantages of fast and slow rates of weight loss When to apply fast or slow rates of weight loss How rates of weight loss can influence lean body mass	Written exam
6.2 Explore metabolic adaptation	The concept of metabolic adaptation The effect that weight loss has on hormones and energy expenditure	Written exam
6.3 Explain how diet breaks and reverse dieting can be utilised in a weight loss protocol	The evidence around the optimal protocol for reverse dieting The use of diet breaks as an aid during dieting	Task Based Assessment
6.4 Recommend weight loss rates to clients	Assess whether fast rates or slow rates of weight loss are most appropriate	Task Based Assessment

### Learning Outcome: 7. Understand the key components of body composition

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
7.1 Outline methods of measuring body composition	The components that make up the 4-compartment model The compartment models for assessing body composition The misconceptions surrounding body fat percentage The functionality of common methods of body composition measurement	Written exam
7.2 Compare the benefits and limitations of body composition measurement methods	The advantages and disadvantages of common methods of body composition assessment	Written exam

### Learning Outcome: 8. Be able to apply composition assessment methods to client recommendations

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
8.1 Apply composition assessment methods to inform client recommendations	The most appropriate method of body composition assessment to recommend for a specific client situation	Task Based Assessment
8.2 Analyse the results of a body composition assessment	How to interpretate body composition assessment data	Task Based Assessment

### Learning Outcome: 9. Understand advanced muscle gain techniques

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
9.1 Explain the muscle hypertrophy hierarchy		Task Based Assessment
9.2 Discuss ways protein feeding strategies can maximise muscle hypertrophy	The effect of protein frequency, type, and timing on muscle hypertrophy The importance of the leucine threshold and the refractory period in relation to muscle protein synthesis How to minimise weight gain during a calorie surplus	Task Based Assessment

## Learning Outcome: 10. Understand evidence-based supplementation for health and performance

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
10.1 Summarise the appropriate steps to take when determining the safety of a supplement	How to make safe and efficacy supplement recommendations Potential interactions between supplements and medications, and how to work within an appropriate scope of practice in specific situations where interactions may exist When it is necessary to use supplements that are batch-tested e.g. Informed Sport	Task Based Assessment
10.2 Explain ways supplements can support optimal health	The potential benefits of supplementing with Omega 3 and Vitamin D and appropriate client-specific dosages and timings of each	Task Based Assessment
10.3 Evaluate ways supplements could support sports performance	The potential benefits of caffeine, creatine monohydrate, beta alanine & sodium bicarbonate supplementation on sports performance	Task Based Assessment

## Learning Outcome: 11. Be able to recommend supplements to support clients' optimal health

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
11.1 Provide dosages and timing of supplement within client recommendations	How to determine individualised dosages and timing recommendations for caffeine, creatine monohydrate, beta alanine and sodium bicarbonate	Task Based Assessment
11.2 Justify supplement recommendations to support clients' optimal health	The potential benefits of supplementation for optimal health	Task Based Assessment

Unit Title	Tools and techniques of nutritional practices
Unit Aim	Unit aim To develop a learners' understanding of the scope of the role, tools and techniques to support nutritional practice.
Unique Unit Number	Y/650/7397
Unit Assessment Method(s)	Coursework
Assessment Specification	The learner will undertake a centre set case study exam, written exam, and a multiple-choice exam. The achievable grades for this unit are Distinction, Pass and Fail. The assessment scores determine the grading as detailed in the additional qualification requirements at the end of this document. Reasonable Adjustments can be applied to these assessments in line with 1st4sport Policy Statement: Access Arrangements

### Learning Outcome: 1. Understand the scope of practice for Nutritionists

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
1.1 Summarise the scope of practice of a Nutritionist	How to work within an appropriate scope of practice and when to refer to a dietitian/ medical professional, with specific reference to the restrictive nature of diets	Task Based Assessment
1.2 Explain when to refer clients who are outside the remit of a Nutritionist	How to work within an appropriate scope of practice and when to refer clients to a medical professional How to support clinical populations as part of a multidisciplinary team, with specific reference to the principle of 'first do no harm', appropriate scope of practice & when to refer clients to a medical professional	Written exam

## Learning Outcome: 2. Understand the appropriate use of food diaries to support nutritional practice

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
2.1 Discuss dietary assessment methods	The different methods of dietary assessment The advantages and disadvantages of each method	Written exam
2.2 Evaluate the accuracy of food diaries	The accuracy of different food diaries How to improve the accuracy of a client food diary	Written exam
2.3 Identify the benefits of using dietary assessments within practice	The benefits of using dietary assessment methods within practice	Task Based Assessment

## Learning Outcome: 3. Be able to apply different dietary approaches to different clients

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
3.1 Differentiate between client nutrition strategies	What the different nutrition strategies are Advantages and disadvantages of different client strategies	Written exam
3.2 Select and apply the correct nutrition strategies for different clients	How to apply different strategies to different clients and goals	Task Based Assessment

## Learning Outcome: 4. Understand the client consultation process

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
4.1 Describe the benefits of asking a client to complete a consultation form prior to a consultation	The benefits of a pre-consultation form What information to include on a pre-consultation form	Written exam
4.2 Outline key components of a client nutritional consultation	How to structure a nutrition consultation The type of information that can/should be obtained during a consultation	MCQs

### Learning Outcome: 5. Know how to apply motivational interview techniques

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
5.1 Distinguish between types of questioning	The difference between open, leading and closed questions	MCQs
5.2 Provide advantages and disadvantages of question types	The advantages and disadvantages of using each type of question	MCQs
5.3 Select and apply the appropriate types of questions	The types of questions to use within a nutrition consultation to get the most valuable information from the client	MCQs

### Learning Outcome: 6. Know ways to build rapport with clients

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
6.1 Identify techniques to build rapport with clients	Listening techniques and motivational interviewing skills	MCQs

### Learning Outcome: 7. Understand approaches for client nutrition strategies and programming

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
7.1 Differentiate between nutrition strategies	What the different nutrition strategies are Advantages and disadvantages of different client strategies	Written exam

## Learning Outcome: 8. Know ways to monitor a client's progress

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
8.1 Evaluate methods for monitoring a clients' progress and when they should be used	What client monitoring is and why we need to do it The different methods of monitoring client progress including quantitative and qualitative methods When different methods of monitoring should be used	Written exam
8.2 Explain how frequently measures should be taken when monitoring clients	How frequently different measures should be taken when monitoring clients and the effects of measuring certain measures more frequently	Task Based Assessment
8.3 Provide ways to improve the accuracy of monitoring methods and techniques	The factors that could affect adherence, change in body weight etc. How to improve the accuracy of monitoring techniques	Written exam

## Learning Outcome: 9. Know how to apply behaviour change theory to practice

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
9.1 Distinguish between theories of behaviour change	Why and when behaviour change is important The different theories of behaviour change, including The Transtheoretical Model, Self-Determination Theory, Motivational Interviewing theory and Cognitive Behavioural Therapy (CBT) and what they involve	Task Based Assessment
9.2 Apply behaviour change theory to practice	How to use apply behaviour change theory into practice	Written exam
9.3 Recognise and assess a client's readiness to change	What readiness to change is How to assess a clients' readiness to change and how to help them further along the readiness to change continuum	Task Based Assessment

### Learning Outcome: 10. Understand ways to support client goals

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
10.1 Distinguish between goal types	The different types of goals, including outcome and process goals The advantages and disadvantages of different types of goals and when to use them with clients	Task Based Assessment
10.2 Describe ways to improve clients goal attainment	How to improve goal attainment The use of implementation intentions to improve goal attainment	Written exam
10.3 Explain ways to implement building habits with clients	How to help client's build habits	Task Based Assessment
10.4 Select and apply the correct nutrition strategies for different clients	How to apply different strategies to different clients and goals	Task Based Assessment

### Learning Outcome: 11. Know ways to design client presentations

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
11.1 Describe factors to consider when creating client presentations	How to make corporate/group nutrition education presentations engaging, interactive and professional	Written exam

### Learning Outcome: 12. Know methods of conducting consultations and nutritional support

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
12.1 Compare and contrast types of coaching	What online, in-person and hybrid coaching involve What skills are applicable in both conventional and online coaching The similarities and differences between online and in-person coaching The advantages and disadvantages of each	MCQs

Unit Title	Nutritional considerations for common clinical populations
Unit Aim	To develop a learners' understanding of common clinical situations and populations such as Polycystic Ovary Syndrome (PCOS), type 2 Diabetes, Irritable Bowl Syndrome (IBS), pregnancy, eating disorders, the elderly and the impact of nutrition within these situations, including the Nutritionists role in terms of remit, treatment and cure.
Unique Unit Number	A/650/7398
Unit Assessment Method(s)	Coursework
Assessment Specification	The learner will undertake a centre set case study exam, written exam and a multiple-choice exam. The achievable grades for this unit are Distinction, Pass and Fail. The assessment scores determine the grading as detailed in the additional qualification requirements at the end of this document. Reasonable Adjustments can be applied to these assessments in line with 1st4sport Policy Statement: Access Arrangements

### Learning Outcome: 1. Understand Irritable Bowel Syndrome (IBS) and Gut Health

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
1.1 Outline healthy eating guidelines and recommendations	Healthy eating guidelines in relation to supporting good digestive health and which foods and dietary patterns may lead to clients experiencing common gut issues How to work within an appropriate scope of practice and when to refer to a dietitian/ medical professional, with specific reference to the restrictive nature of diets such as the low FODMAP diet	Written exam
1.2 Compare the signs and symptoms of gut disorders	The different gut health issues The signs, symptoms and causes of IBS, Inflammatory Bowel Disease (IBD) and Coeliac Disease Alternative and non-evidence-based interventions that may get discussed in the health and fitness industry	MCQs,

## Learning Outcome: 2. Understand nutritional considerations for pregnant clients

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
2.1 Explain the key nutritional considerations during pregnancy	Why nutrition is important before, during and after pregnancy Foods to avoid or limit during pregnancy The benefits of supplementation before, during and post-pregnancy Recommended dosage of supplements at differing stages of pregnancy, i.e. during, before, after	Written exam
2.2 Explain the national guidance in relation to healthy weight gain during pregnancy and the risks associated with overweight and underweight	The optimal weight before pregnancy and the risks of being overweight or underweight What gestational diabetes is and the potential risks involved Why gestational diabetes occurs and how to support the management of it	Written exam
2.3 Outline nutritional considerations and requirements in breastfeeding clients	Fluid requirements during breastfeeding and foods and supplements to promote/limit during breastfeeding	MCQs

### Learning Outcome: 3. Understand nutritional considerations for clinically obese clients

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
3.1 Compare types of client obesity	What obesity is and the different obesity classifications	MCQs, /p>
3.2 Identify methods to assess client's obesity level	The methods of assessment used to classify if an individual is overweight or obese	MCQs
3.3 Describe factors that may influence the development of obesity	Obesity as a multifaceted disease and the influence of genetic and environmental factors in the development of obesity	Written exam
3.4 Outline the health risks for obese clients	The risks and diseases that are associated with obesity The relationship between Binge Eating Disorder (BED) and obesity	MCQs
3.5 Compare types of dietary interventions for obese clients	The different dietary interventions that could be implemented with clients with obesity, including very low kcal diets, very-low carbohydrate diets, alternate day fasting and carbohydrate periodisation protocols	Written exam
3.6 Outline the types and potential benefits of bariatric surgery	The types of bariatric surgery The benefits of bariatric surgery in obese populations	MCQs
3.7 Outline the criteria a client must meet to qualify for bariatric surgery	The criteria required to qualify for bariatric surgery  How to work within an appropriate scope of practice in specific clinical situations such as bariatric surgery qualification and aftercare	MCQs

## Learning Outcome: 4. Understand nutritional considerations and strategies for elderly clients

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
4.1 Define anabolic resistance		Written exam
4.2 Describe sarcopenia, its relevance in elderly populations & how nutrition can reduce the risk of sarcopenia	What sarcopenia is, the health risks associated with it and its symptoms Nutritional strategies to reduce the risk of sarcopenia	Written exam
4.3 Describe what osteoporosis is and clarify its relevance in elderly populations	The difference between low bone mineral density, osteopenia, and osteoporosis How nutrition and exercise can reduce the risk of osteoporosis	Written exam
4.4 Outline supplements that might be beneficial for elderly clients and recognise symptoms that may suggest nutrient deficiencies	The potential benefits of supplements (including omega 3 fish oils, creatine, calcium, and vitamin D) on low bone mineral density, sarcopenia, age-related cognitive decline and neurodegenerative diseases Common symptoms of micronutrient deficiencies	MCQS
4.5 Recommend practical ways to help an elderly client consume sufficient energy	Age-related weight loss, why it happens and what can be done about it How to work within an appropriate scope of practice in situations such as age-related weight loss	Written exam

## Learning Outcome: 5. Know the signs, symptoms and health implications of diabetes

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
5.1 Compare and contrast types of diabetes	The different types of diabetes The causes and diagnosis criteria of Type 1 diabetes The risk factors for, and symptoms of, Type 2 diabetes	MCQs
5.2 Identify the current diagnostic criteria for hyperglycaemia	The clinical methods of measuring blood glucose & current diagnostic criteria for hyperglycaemia How to work within an appropriate scope of practice in specific clinical situations such as pre-diabetes, and type 2 diabetes	MCQs
5.3 Explain the physiology of insulin resistance	Where insulin resistance occurs in the body and factors that can help improve insulin sensitivity	Task Based Assessment
5.4 Outline the health risks of chronic untreated hyperglycaemia and diabetes	The health consequences of not managing hyperglycaemia and diabetes	MCQs
5.5 Recommend dietary management strategies for types of diabetes	How nutrition and weight management can support the management of blood glucose How lifestyle can support the management of blood glucose How to work within an appropriate scope of practice in specific clinical situations such as Type 1 and Type 2 diabetes and when to refer clients to a medical professional	Written exam

### Learning Outcome: 6. Know the signs, symptoms and health implications of Polycystic Ovary Syndrome (PCOS)

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
6.1 Identify the current diagnostic criteria for, and the symptoms of, Polycystic Ovary Syndrome (PCOS)	What Polycystic Ovary Syndrome (PCOS) is, how it is diagnosed and the prevalence and symptoms of Polycystic Ovary Syndrome (PCOS) How to work within an appropriate scope of practice in specific clinical situations such as PCOS	MCQs
6.2 Evaluate ways to manage and potentially improve Polycystic Ovary Syndrome (PCOS) symptoms	How nutrition and lifestyle changes can help manage and potentially improve symptoms of PCOS	Written exam
6.3 Explain the effect of PCOS on metabolism and fuel utilisation	Metabolic inflexibility, metabolic adaptation and the changes in substrate utilisation associated with PCOS	Written exam

### Learning Outcome: 7. Understand Cardiovascular Disease (CVD) and cholesterol

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
7.1 Explore the physiology of Cardiovascular Disease (CVD)	The physiology of cardiovascular disease including the role of cholesterol, lipoproteins and apoproteins How to interpret blood lipid results in relation to CVD risk and health	Written exam
7.2 Identify the risk factors for Cardiovascular Disease (CVD)	The different risk factors for Cardiovascular Disease (CVD) including modifiable and non-modifiable risk factors	MCQs
7.3 Describe strategies to help improve a client that has been diagnosed with high cholesterol	The differences between treatment and preventative measures The use of statins in treating high cholesterol and the side effects associated with statin treatment Nutritional interventions and supplementation to support high cholesterol and Cardiovascular Disease (CVD) risk How to work within an appropriate scope of practice in specific clinical situations such as CVD and high cholesterol	Written exam

## Learning Outcome: 8. Know ways to support clients with eating disorders

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
8.1 Identify predisposed psychological factors and key indicators associated with the development of eating disorders	Key indicators and psychological signs of eating disorders	MCQs
8.2 Compare and contrast different types of eating disorder	The different types of eating disorders and their characteristics The evidence behind treatment options for eating disorders	Written exam
8.3 Identify the signs of an eating disorders	Common behavioural signs of an eating disorder	MCQs
8.4 Recognise when to refer a client to a qualified eating disorder specialist	When to refer a client to a qualified eating disorder specialist What practitioners should do to reduce the risk of someone developing an eating disorder when providing nutrition advice to healthy clients	Written exam

Unit Title	Performance nutrition programming
Unit Aim	To develop a learners knowledge and skills to implement sport-specific nutrition programmes including fuelling and recovery strategies, dietary periodisation, competition protocols, and nutritional approaches to maximise training adaptations to a wide variety of disciplines and contexts.
Unique Unit Number	D/650/7399
Unit Assessment Method(s)	Coursework
Assessment Specification	The learner will undertake a centre set case study exam, written exam and a multiple-choice exam. The achievable grades for this unit are Distinction, Pass and Fail. The assessment scores determine the grading as detailed in the additional qualification requirements at the end of this document. Reasonable Adjustments can be applied to these assessments in line with 1st4sport Policy Statement: Access Arrangements

## Learning Outcome: 1. Understand ways to nutritionally prepare bodybuilding clients for a bodybuilding show

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
1.1 Explain the physiological impact of chronic dieting and dieting to low levels of body fat	The hormonal and physiological impact of chronic dieting and dieting to low levels of body fat Factors masking changes in body weight with reductions in body fat	Written exam
1.2 Conduct calculations regarding energy requirements of a physique athlete in relation to their energy expenditure and individual goals	How to calculate energy requirements for bodybuilding clients How to estimate exercise energy expenditure for bodybuilding clients	Written exam
1.3 Implement a variety of dietary methods to maximise adherence to a bodybuilding fat loss diet	Different dietary methods and their application in the context of a fat loss phase within bodybuilding prep Dietary concepts such as the satiety index, which can be utilised to maximise adherence during a fat loss phase How to programme protein intakes and Calories to maximise muscle retention	Written exam
1.4 Explain the benefits of a dietary refeed within a bodybuilding diet and describe ways to implement a dietary refeed	The physiological consequences and potential psychological benefits of a dietary refeed How to implement a dietary refeed within a bodybuilding diet	Written exam
1.5 Outline the health risks involved with bodybuilding as a sport	Risk factors associated with bodybuilding and physique competitions	MCQs

## Learning Outcome: 2. Understand how to nutritionally support an endurance athlete within a training and competition setting

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
2.1 Explain energy availability in the context of endurance sport and the associated risks of low energy availability	How to calculate an athlete's energy availability The physiological effect of low energy availability (RED-S) How to work within an appropriate scope of practice in specific clinical situations such as hypothalamic amenorrhea caused by low energy availability	Task Based Assessment
2.2 Explain the theory of fat adaptation and the practical application of low carbohydrate availability strategies	What fat adaptation is and the advantages/disadvantages of becoming fat adapted within endurance performance Protocols to implement to facilitate fat adaptation whilst maintaining glycolytic capacity How to programme low carbohydrate availability protocols into an athlete's training schedule	Task Based Assessment
2.3 Describe pre-race and within race nutritional strategies	Contemporary views on carbohydrate loading and how to implement it How to programme nutrition & hydration strategies for endurance competition/events	Task Based Assessment
2.4 Critically analyse the use of supplementation within endurance performance	Supplements that can aid endurance adaptation and performance Evidence-based ergogenic doses for supplements that can aid endurance adaptation and performance	Task Based Assessment
2.5 Conduct the calculation for evidence-based ergogenic doses of supplements	How to calculate ergogenic doses for different supplements	Written exam

### Learning Outcome: 3. Understand how to develop a nutritional programme for a team sports athlete

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
3.1 Assess carbohydrate requirements for team sport athletes	How to calculate carbohydrate requirements for glycogen supercompensation The practicalities of programming meals/snacks to meet high carbohydrate requirements	Task Based Assessment
3.2 Justify when an athlete should consume carbohydrate during a match	When (and how much) carbohydrate is appropriate to consume during a match/game	Task Based Assessment
3.3 Describe nutritional and lifestyle factors that can benefit or impair team sports performance	Glycogen depletion and replenishment The impact of alcohol consumption on performance and recovery The impact of sleep on performance and recovery	Task Based Assessment
3.4 Select and apply ways to periodise nutritional strategies during a season and implement them within a client scenario	How to periodise nutrition for athletes throughout the competitive year e.g., off-season, pre-season and within season	Task Based Assessment

### Learning Outcome: 4. Understand ways to support a weight-making athlete to safely make weight for a competition while maximising performance

Assessment Criteria The learner can:	Mandatory Delivery Content The learner will develop an understanding of:	Evidence Requirements The learner is required to complete:
4.1 Explain the different acute making weight strategies and when they are appropriate	Different acute weight making including removal of creatine, sodium restriction, glycogen depletion, fibre manipulation, safe/natural laxatives, safe levels of dehydration The difference between weight loss and fat loss in the context of weight making sports	Written exam
4.2 Describe advanced dietary strategies to implement post-weigh-in	How to aggressively rehydrate and replenish glycogen stores post-weigh-in Supplements that may support the post-weigh-in period Specific practical recommendations for athletes with a 2-hour or 24-hour weigh-in window	written exam

## Qualification Conditions: Delivery and assessment requirements

To complete the delivery, assessment, and internal quality assurance of the qualification, providers will be required to adhere to the guidance set out in the Recognised Centre Handbook.

## Qualification Approval Conditions: Workforce requirements

In addition to the workforce requirements stated in the Recognised Centre Handbook, the following qualification specific requirements must be met and evidenced.

### Tutor(s):

hold an MSc within a nutrition-related subject and must provide proof of completion of Mac Nutrition orientation before delivery.

### Assessor(s):

hold the 1st4sport Level 5 Diploma in Advanced Nutrition Science or equivalent. Must provide proof of completion of Mac Nutrition orientation before delivery.

### Internal Verifier(s) and Quality Assurer(s):

hold an MSc within a nutrition-related subject and must provide proof of completion of Mac Nutrition orientation before delivery.

## Additional Qualification Requirements

Pass Distinction Sum of all Assessment Points Awarded 16-42 43-44

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