

RSPH Level 4 Certificate in Nutrition for Physical Activity and Sport

July 2019

Total Qualification Time (TQT) 90 Hours

Guided Learning Hours: 45 Hours

Ofqual Qualification Number: 600/6963/6

Description

This is a Level 4 qualification suitable for individuals who require an understanding of nutrition and diet and their effect on health. It is particularly relevant for people working in the health, fitness or catering professions who might have a role in the promotion of healthy eating or the preparation of meals, menus and diets for sportspeople at all levels of ability. The objective of the qualification is to provide knowledge and understanding of the nutritional requirements for a healthy diet, the effect of diet on health and the importance of hydration. These principles are then applied to fulfilling the dietary requirements for physical activity and sport.

The qualification is divided into two units: *Principles of Nutrition* and *Nutrition for Physical Activity and Sport*. The qualification will be awarded to any learner who attains the learning outcomes for these units.

A separate Level 4 Award is available for candidates wishing to take only the *Principles of Nutrition* unit.

Content:

	Page
Unit NUT 4.1: Principles of Nutrition	3
Unit NUT 4.3: Nutrition for Physical Activity and Sport	6
Learner Guidance	8
Recommended Reading	8
Useful Websites	8
Recommended Prior Learning	8
Centre Guidance	8
Registration of Candidates and Submission of Internally Assessed Work	8
Assessment	9
Credit accumulation and transfer	9
Exemptions	9
Restrictions on Candidate Entry	9
National Occupational Standards	9
Special Needs	10
Recommended Qualifications and Experience of Tutors	10
Progression Opportunities	10
How to apply to offer this qualification	10
Contact Information	10

Unit NUT 4.1: Principles of Nutrition

Credit Value: 7

Guided Learning Hours: 30

Unit reference number: J/504/4245

Learning Outcomes and Assessment Criteria

- 1 Understand the sources, functions and uses of macro and micro nutrients, *by being able to:***
 - 1.1 Identify dietary sources of macro and micro nutrients
 - 1.2 Explain the physiological functions of macro and micro nutrients

- 2 Understand the energy, nutrient and hydration requirements of individuals throughout life, *by being able to:***
 - 2.1 Explain the components of energy consumption and expenditure
 - 2.2 Explain the energy, hydration and nutrient requirements at different lifetime stages
 - 2.3 Outline factors that affect energy, nutrient and hydration requirements of individuals in relation to social, cultural, religious and ethnic groups

- 3 Understand the effects of diet on health, *by being able to:***
 - 3.1 Describe the relationship between diet and disease
 - 3.2 Describe possible dietary influences for different groups

- 4 Understand legislation as it relates to labelling and advertising of foods, *by being able to:***
 - 4.1 Assess how food labels conform to legislative requirements
 - 4.2 Outline the legal requirements in relation to health claims and nutrition claims

Content:

- 1 Sources, functions and uses of macro and micro nutrients**
 - 1.1 *Dietary sources of macro and micro nutrients:*
Carbohydrates: simple and complex sugars; starches; non-starch polysaccharides; food sources.
Protein: essential (indispensable) and non-essential amino acids; biological value; complementation; food sources.
Fats: saturated, monounsaturated and polyunsaturated; omega 3; trans-fats; food sources.
Vitamins: water soluble (B vitamin group to include B1, B2, B6, B12, Folate and Vitamin C) and fat-soluble (Vitamins A, D, E, K) food sources; losses; fortification and supplementation.

Minerals: mineral elements (Iron, Calcium, Phosphorus, Sodium, Potassium, Zinc, Chloride, Magnesium, Selenium, Fluoride); food sources; fortification and supplementation.

1.2 *Physiological functions of macro and micro nutrients:*

Carbohydrates: as energy source; role of dietary fibre.

Protein: growth and maintenance; as a source of energy.

Fats: as energy source; source of fat-soluble vitamins; role of cholesterol and triglycerides; essential fatty acids.

Vitamins: physiological roles; antioxidants.

Minerals physiological roles; structural roles.

2 Hydration, dietary requirements and food choices of individuals throughout life

2.1 *Components of energy consumption and expenditure:*

Units of energy content of food (calories, joules, kilocalories, kilojoules); energy sources, e.g. fats, carbohydrates, proteins, alcohol; contribution of these to energy consumption; indicators of energy consumption and expenditure such as body composition, body weight, skin fold measurements, Body Mass Index (BMI).

Energy expenditure; basal metabolic rate, energy used in different activities such as running, walking, cycling, swimming; energy expenditure of different occupations.

2.2 *Energy, hydration and nutrient requirements at different lifetime stages:*

Energy requirement across the lifespan (babies, toddlers, children, adolescents, adults, pregnancy, breast feeding, older age).

Hydration requirements across the lifespan (babies, toddlers, children, adolescents, adults, pregnancy, breast feeding, older age).

Nutrient requirements across the lifespan (babies, toddlers, children, adolescents, adults, pregnancy, breast feeding, older age).

Effect of alcohol on hydration.

Use of Dietary Reference Values to measure nutrient requirements taking into account current guidance and to include the Eatwell Plate.

2.3 *Factors that affect nutrient requirements in relation to social, cultural, religious and ethnic groups:* factors affecting requirements of individuals such as level of activity, metabolic rate, health status; requirements of communities; lifestyle choices: vegetarian and vegan; religious groups (Hindu, Muslim and Jewish); effect of food preparation methods on nutrient content of meals..

3 Effects of diet on health

3.1 *Relationship between diet and disease:* Diseases to include

Dental caries: roles of sugars and acids.

Coronary heart disease and hypertension: roles of fats, salt, antioxidants and obesity.

Obesity and Type 2 diabetes: roles of carbohydrate, saturated fat and weight loss.

Under nutrition: anaemia due to iron deficiency or lack of Vitamin B12; rickets due to lack of Vitamin D and calcium; severe weight loss due to lack of calories.

Cancer: roles of antioxidants, fibre, salt and alcohol.

Food sensitivity: such as coeliac disease, nut allergy and milk intolerances.

3.2 *Possible dietary influences for different groups:*

Dietary habits: e.g. meal patterns, snacking, personal tastes, food availability

Economic: e.g. cost of food, access to shops; food supply, eg seasonal variation

Socio-cultural: e.g. beliefs, socialisation, food rituals, role of food in families and communities, vegan, vegetarian, Hindu, Muslim, Jewish

Education:, e.g. public health, health education, marketing and labelling; role of health professionals

4 **Legislation as it relates to labelling and advertising of foods**

4.1 *Food labelling requirements:* Assessment of food labels with respect to legislative requirements; front of pack labelling, guidance and voluntary information.

4.2 *Legal requirements in relation to health claims and nutrition claims:* Current regulations, guidance, prohibited claims.

Unit NUT 4.3: Nutrition for Physical Activity and Sport

Credit Value: 6

Guided Learning Hours: 15

Unit reference number: L/504/4246

Learning Outcomes and Assessment Criteria

- 1 Understand the requirements for nutrients and hydration during physical activity , *by being able to:***
 - 1.1 Assess the macro and micro nutrient requirements for different physical activities and sports
 - 1.2 Define the role of nutrients in energy production
 - 1.3 Identify internal energy reserves and their roles during exercise
 - 1.4 Develop optimal hydration guidelines for participants in different physical activities and sports

- 2 Understand the relationship between nutrition and physical activity , *by being able to:***
 - 2.1 Explain how to estimate energy requirements based on physical activity levels and other relevant factors
 - 2.2 Identify energy expenditure and nutrient use for different physical activities

- 3 Understand how to advise participants in physical activities on nutritional strategies (and menus) to improve performance , *by being able to:***
 - 3.1 Develop a nutritional strategy for participants to improve performance
 - 3.2 Evaluate the use of performance enhancing products and sports drinks in nutritional planning for participants in sports and physical activity

Content

1 Requirements for nutrients and hydration during physical activity

- 1.1 *Macro and micro nutrient requirements for different physical activities and sports:* Requirements for carbohydrate, fats and proteins; effects of sweating; maintenance of electrolyte levels; nutrient requirements for different activity levels, duration and standards e.g. speed, power and endurance, competition and leisure; importance of recovery.
- 1.2 *Role of nutrients in energy production:* mobilisation rates of carbohydrates and fats; energy obtained from aerobic and anaerobic metabolism; importance of glycaemic index; carbohydrate loading.
- 1.3 *Internal energy reserves and their roles during exercise:* Fat and glycogen stores, protein, utilisation rates, energy production.
- 1.4 *Optimal hydration guidelines for participants in different physical activities and sports:* Importance of fluid balance maintenance; fluid intake and loss; fluid intake timing; importance in recovery.

2 Relationship between nutrition and physical activity

- 2.1 *How to estimate energy requirements based on physical activity levels and other relevant factors:* Age, weight, percentage body fat; use of tables e.g. Body Mass Index (BMI) and body composition; exercise spirometry.
- 2.2 *Energy expenditure and nutrient use for different physical activities:* Aerobic and anaerobic respiration; eating disorders (bulimia, anorexia, over and under consumption); vitamins associated with energy metabolism; nutrient and energy requirements of training, activity/competition and recovery.

3 How to advise participants in physical activities on nutritional strategies (and menus) to improve performance

- 3.1 *Nutritional strategy for participants to improve performance:* Type of activity; age; Body Mass Index (BMI); body fat percentage; resources; lifestyle; cultural factors; menu and meal planning for physical activity and sport; different requirements for training, competition and recovery.
- 3.2 *Use of performance enhancing products and sports drinks in nutritional planning for participants in sports and physical activity:* Determination of levels of performance enhancing products used; determination of performance enhancing products need; pros and cons of performance enhancement products usage

Learner Guidance

Recommended Reading

Bean, Anita (2010). Anita Bean 's Sports nutrition for young people	A+C Black
Bean, Anita (2010). Anita Bean's Sports nutrition for women	A+C Black
Bean, Anita (2009). The complete guide to sports nutrition 6 th Ed.	A+C Black
Benardot, Dan (2012). Advanced Sports Nutrition 2 nd Ed.	Amazon
Burke, Louise & Greg Cox (2010). Complete guide to food for sports performance.	Allen & Unwin
Denby, N, S Baic and C Ringler (2011) Nutrition for dummies 2 nd Ed.	John Wiley and Sons
Geissler, C and H Powers (2009) Fundamentals of human nutrition for students and practitioners in the health sciences.	Elsevier
Mann, J and S Truswell (Eds) (2012) Essentials of human nutrition 4 th Ed.	Oxford University Press
Ridgway, Judy (1996). Food for sport.	Boxtree

Useful Web-sites

British Dietetic Association	www.bda.uk.com
British Nutrition Foundation	www.nutrition.org.uk
The Nutrition Society	www.nutritionandsociety.org

Recommended prior learning

It is recommended that candidates hold a Level 3 qualification in nutrition such as the RSPH Level 3 Award in Nutrition for Healthier Food and Special Diets or the RSPH Certificate in Nutrition and Health.

Centre Guidance

Registration of Candidates and Submission of Internally Assessed Work

Candidates must be registered with RSPH and have a candidate number before any work can be submitted to RSPH for external assessment.

Candidate assignments must be internally assessed and submitted to RSPH with an *candidate assessment front sheet* (available from the centre area of the RSPH web-site www.rsph.org.uk) signed by the candidate and a completed *candidate assessment summary form* for each of the units.

All candidate work for the qualification must be completed and submitted to RSPH within one calendar year of registration (the *registration period*). In the event that candidate work is referred by the external assessor the candidate has a period of three months in which to resubmit the work, or by the end of the registration period, whichever is the shorter. An additional fee will be charged for the resubmission of assignments

In exceptional circumstances RSPH may extend the registration period for a candidate or cohort of candidates.

Assessment

Attainment of the Learning Outcomes for each unit will be assessed by assignments. Assignments will be provided by RSPH and internally marked by the centre. Centre marks will be subject to external verification by RSPH. In order to obtain a *Pass* for each unit, candidates must be able to demonstrate that they have achieved the learning outcomes for the unit.

In order to achieve a *Pass* for the qualification, candidates must obtain a *Pass* for both of the units.

Credit accumulation and transfer

The unit(s) comprising this qualification may also form part of other RSPH qualifications. The successfully completed units can be credited towards additional qualifications if the candidate is registered for the additional qualification within three years of achieving the unit.

Exemptions

Holders of the following qualifications are exempt from Unit 1 of this qualification provided that the qualification has been achieved within five years of registering for the L4 Certificate in Nutrition for Physical Activity and Sport:

RSPH L4 Advanced Diploma in Nutrition
RSPH Diploma in Nutrition and Health

Holders of the following Open University unit are exempt from Learning outcomes 1 – 3 of unit 1 of this qualification provided that the unit has been achieved within five years of registering for the L4 Certificate in Nutrition for Institutional Food Services:

Open University Unit SK183 Understanding Human Nutrition

Restrictions on Candidate Entry

There are no restrictions on candidate entry.

National Occupational Standards

The qualification has been mapped to the following National Occupational Standards of Skills Active:

D462. Apply the principles of nutrition to support client goals as part of an exercise and physical activity programme.

Special Needs

Centres that have candidates with special assessment needs should consult RSPH's Reasonable Adjustments and Special Consideration Policy; this is available from the RSPH website (www.rsph.org.uk).

Recommended Qualifications and Experience of Tutors

The Society would expect that tutors have teaching experience and be qualified to at least level 4 or equivalent in a nutritionally related subject, but recognises that experienced teachers can often compensate for a lack of initial subject knowledge, or experienced practitioners for a lack of teaching experience. It is, however, recommended that tutors have experience of menu planning for a variety of groups

Progression Opportunities

Learners achieving this qualification are likely to utilise their learning within a physical activity environment. Whilst this is a level 4 qualification, the learner could consider adding the RSPH Level 2 Award in Identifying and controlling food allergy risks to this to enhance their support they can offer.

How to apply to offer this qualification

To become a centre approved to offer this qualification, please complete the 'Centre Application' which you can find on our website in the Qualifications and Training section. If you are already an approved centre, please complete the 'Add an additional qualification form' in the Centre area on the website www.rsph.org.uk. You will need to attach a CV to this application. Please contact the Qualifications Department at centreapproval@rsph.org.uk if you need any assistance.

Contact Information

The Qualifications Department,
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