

Unit 14: Exercise, Health and Lifestyle

Unit code:	T/502/5724
QCF Level 3:	BTEC National
Credit value:	10
Guided learning hours:	60

● Aim and purpose

The aim of this unit is for learners to be able to assess the lifestyle of an individual and provide advice on lifestyle improvement.

● Unit introduction

A healthy lifestyle is important in terms of quality of life. Individuals who take part in physical activity, eat a healthy diet, don't smoke, drink in moderation and manage their stress levels are likely to live longer and cope better with the daily demands of life. Lifestyle plays a key role in the prevention of a large number of diseases including coronary heart disease, cancer and obesity.

This unit gives learners the knowledge and skills to assess the lifestyle of an individual, provide advice on lifestyle improvement and plan a health-related physical activity programme. The unit is particularly relevant for individuals aiming to work in the exercise and fitness industry or in health promotion. Communication skills, which are highly important in these areas of work, will be developed.

The first part of the unit introduces learners to the importance of lifestyle in the maintenance of health and wellbeing. Learners will examine physical activity, alcohol consumption, smoking, diet and stress, looking at how each factor can affect the health of an individual. Guidelines for physical activity, recommendations for alcohol consumption, smoking cessation strategies, stress management techniques and dietary changes are covered. Learners will also develop an understanding of behaviour change.

The second part of the unit requires learners to assess the lifestyle of an individual and use the information gathered to provide advice on lifestyle improvement. This includes planning a health-related physical activity programme.

● Learning outcomes

On completion of this unit a learner should:

- 1 Know the importance of lifestyle factors in the maintenance of health and wellbeing
- 2 Be able to assess the lifestyle of a selected individual
- 3 Be able to provide advice on lifestyle improvement
- 4 Be able to plan a health-related physical activity programme for a selected individual.

Unit content

1 Know the importance of lifestyle factors in the maintenance of health and wellbeing

Lifestyle factors: physical activity recommendations and guidelines; benefits of physical activity; alcohol recommendations and guidelines; risks associated with excessive drinking, eg stroke, cirrhosis, hypertension, depression; smoking – health risks, eg coronary heart disease, cancer, lung infections; stress – health risks, eg hypertension, angina, stroke, heart attack, ulcers; diet eg benefits of a healthy diet, effects of poor nutrition, recommendations and guidelines

2 Be able to assess the lifestyle of a selected individual

Lifestyle questionnaire: levels of physical activity; alcohol consumption; smoking; stress levels; diet

Consultation: one-to-one consultation; communication, eg questioning, listening skills, non-verbal communication, client confidentiality

3 Be able to provide advice on lifestyle improvement

Strategies: ways to increase physical activity levels, eg walking, stair climbing, cycling; alcohol, eg seek alternatives, counselling and therapy, detoxification, self-help groups, alternative treatment and therapies; smoking, eg acupuncture, NHS smoking helpline, NHS stop-smoking services, nicotine replacement therapy; stress management techniques, eg assertiveness, goal setting, time management, physical activity, positive self-talk, relaxation, breathing; diet, eg timing of food intake, eating more or less of certain foods, food preparation; behaviour change, eg stages of change, common barriers, cognitive and behavioural strategies

4 Be able to plan a health-related physical activity programme for a selected individual

Collect information: eg personal goals, lifestyle, medical history, physical activity history, attitudes, motivation

Goal setting: goals (short-, medium- and long-term); SMART (specific, measurable, achievable, realistic, time bound) targets

Principles of training: overload; specificity; progression; individual differences; variation; reversibility; FITT (frequency, intensity, time and type) principles

Appropriate activities: eg walking, cycling, hiking, swimming

Exercise intensity: eg rating of perceived exertion (RPE), maximum heart rate, maximum heart rate reserve, talk test

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 describe lifestyle factors that have an effect on health	M1 explain the effects of identified lifestyle factors on health	
P2 design and use a lifestyle questionnaire to describe the strengths and areas for improvement in the lifestyle of a selected individual [IE1, IE2, CT1, CT2, RL1]	M2 explain the strengths and areas for improvement in the lifestyle of a selected individual	D1 evaluate the lifestyle of a selected individual and prioritise areas for change
P3 provide lifestyle improvement strategies for a selected individual [CT3, EP3, EP4]	M3 explain recommendations made regarding lifestyle improvement strategies.	D2 analyse a range of lifestyle improvement strategies.
P4 plan a six-week health-related physical activity programme for a selected individual. [CT3, CT5]		

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers	RL – reflective learners TW – team workers	SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

The unit should be introduced with the tutor identifying different lifestyle factors that affect health. There is a wealth of information available and lifestyle factors could be investigated in greater depth by learners working in groups. These groups should then feedback to the whole class on the information gained. Groups should be briefed on the range of information they need to research. This includes national recommended physical activity guidelines, benefits of physical activity, recommendations for alcohol consumption, risks of excessive drinking, health risks of smoking, benefits of a healthy diet and health risks associated with excessive stress levels.

Learners need to design and use a lifestyle assessment questionnaire for a selected client. Tutors should provide a range of examples which can be reviewed. Questionnaires can be obtained from local health clubs and are also published in a number of textbooks. Learners will then have a knowledge base that they can use to devise their own questionnaires. Learners can complete the questionnaires, exchange them with their peers and practise giving feedback to their peers. Learners need to conduct a one-to-one lifestyle consultation. Tutors need to cover the format this should take, ensure learners demonstrate effective communication skills and discuss the importance of client confidentiality. Learners can practise their skills when working with their peers in a role-play situation.

Learners need to be able to give advice on lifestyle improvement. Tutors should cover a range of lifestyle improvement strategies for; increasing physical activity, stopping smoking, reducing alcohol consumption, improving diet and managing stress. The area of behaviour change should also be introduced, with tutors explaining the stages of change, common barriers to change, and cognitive and behavioural strategies for initiating change. Learners should then be given the opportunity to develop their knowledge and skills through practical activities and case studies.

Linked to lifestyle improvement advice is the requirement for learners to plan a health-related physical activity programme. Prior to planning the physical activity programme, tutors should cover the theory behind programme design. Learners need to understand the principles of training, methods of monitoring intensity, and suitable activities for a health-related programme. The importance of collecting relevant information and of setting SMART targets also needs to be covered. Learners can develop their skills by planning a health-related exercise programme for individual case studies provided by tutors. A range of individuals with different activity levels should be covered to give a breadth of knowledge. Practical activities using pedometers can give learners an appreciation of the amount of physical activity required for health benefits and the impact of small lifestyle changes.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Tutor introduces the unit and outlines the assessment.
Assignment 1: Lifestyle and Health (P1, M1). Tutor introduces the assignment brief. Includes learner-initiated private study.
Physical activity recommendations and health benefits, alcohol recommendations, health risks of excessive drinking, health risks of smoking, health risks of excessive stress, healthy eating – group research and feedback to class. Includes learner initiated private study.
Evaluation of personal lifestyle: individual evaluation of lifestyle including work completed in learners' own time. Paired discussion.
Increasing physical activity – practical activities using pedometers including learner activity completed in own time.
Assignment 2: Lifestyle Improvement (P2, M2, D1, P3, M3, D2, P4). Tutor introduces the assignment brief. Includes learner initiated private study.
Planning health-related exercise programmes – tutor introduces topic. Small-group case studies. Learners plan a health-related exercise programme for an individual, case studies provided. Feedback to class.
Smoking cessation and ways to reduce alcohol consumption: tutor facilitates class discussion on strategies. Small-group activity making recommendations for scenarios provided and feedback to class.
Stress management techniques: tutor-led practical activities covering time management, positive self talk, relaxation, breathing, assertiveness and goal setting.
Dietary changes – tutor introduces topic. Small-group case studies. Learners make recommendations on how to improve a diet based on food dietary information provided. Feedback to class.
Behaviour change – tutor-led class discussion on behaviour change and strategies that can be used.
Lifestyle questionnaire design – tutor introduces topic. Group evaluation of questionnaires and individual design of own questionnaire.
Consultation skills – role play.
Review of unit and assessment.

Assessment

For P1, learners need to describe lifestyle factors that have an effect on health. Physical activity, alcohol consumption, smoking, stress and diet must all be covered. Learners need to describe the benefits of physical activity, recommendations for alcohol consumption, health risks of excessive drinking, health risks of smoking, health risks of high stress levels and health risks of an unhealthy diet. Evidence could be in the form of a written report or information booklet.

Criteria P2, P3 and P4 lend themselves to being assessed together. For P2, learners need to collect information on the lifestyle of an individual using a self-designed questionnaire and one-to-one consultation. Learners should devise their own questionnaire and a copy of the completed version should be provided as assessment evidence. A completed tutor observation checklist would provide suitable evidence of the one-to-one consultation. Alternatively, video evidence would be acceptable, supported by a tutor observation record. For P3, learners need to provide lifestyle improvement strategies for a selected individual, including advice on stress management, smoking cessation, reducing alcohol consumption and dietary changes where appropriate. Evidence could be in the form of a written report or a record of a consultation with the individual, for example an observation checklist or a video recording. For P4, learners need to plan a safe and effective six-week health-related physical activity programme for a selected individual. Ideally this should be the individual on whom the lifestyle assessment has been done. A copy of the programme should be presented as evidence. The principles of training should have been applied and the programme must be suitable for the individual's needs and goals. It is also important that suitable activities have been selected and a suitable exercise intensity prescribed.

Grading criterion M1 builds on P1, and requires learners to explain the effects of identified lifestyle factors on health. Physical activity, alcohol consumption, smoking, stress and diet need to be covered.

For M2, which builds on P2, learners need to explain the strengths and areas for improvement of a selected individual's lifestyle and explain recommended lifestyle improvement strategies. This could be best achieved in a written report. In order to explain the strengths and areas for improvement learners should compare physical activity levels with national guidelines, compare alcohol consumption with national guidelines, assess stress levels, assess smoking habits and assess the diet of the individual against guidelines. Grading criterion M3 builds on P3, and requires learners to explain recommendations made for lifestyle improvement strategies. These strategies should be explained in terms of their suitability for a particular individual.

For D1, which builds on P2 and M2, learners need to evaluate the lifestyle of a selected individual and prioritise areas for change. In doing this, they need to make some judgements about the strengths and areas for improvement. For D2, which builds on P3 and M3, learners need to analyse a range of lifestyle improvement strategies; this involves looking at the positives and negatives of different strategies and their impact.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
PI, M1	Lifestyle and Health	Having gained employment as a health fitness instructor you examine the lifestyle factors that have an effect on health.	Information booklet.
P2, P3, P4, M2, M3, D1, D2	Lifestyle Improvement	Working as a health fitness instructor involves carrying out lifestyle assessments for clients. Assess the lifestyle of an individual and provide lifestyle improvement strategies. Plan a health-related physical activity programme for the individual.	Production of questionnaire. Practical observation and assessment of a client consultation. Observation record. Written health-related exercise programme.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Sport sector suite and the BTEC Sport and Exercise Sciences sector suite. This unit has particular links with the following unit titles in the BTEC Sport suite and the BTEC Sport and Exercise Sciences suite:

Level 2 Sport	Level 3 Sport	Level 3 Sport and Exercise Sciences
Exercise and Fitness Instruction	Principles of Anatomy and Physiology in Sport	Exercise for Specific Groups
Development of Personal Fitness	Fitness Training and Programming	Anatomy for Sport and Exercise
Nutrition for Sports Performance	Sports Coaching	Sport and Exercise Physiology
Lifestyle and the Sports Performer	The Physiology of Fitness	Fitness Training and Programming
Anatomy and Physiology for Sport	Instructing Physical Activity and Exercise	Instructing Physical Activity and Exercise
	Sports Nutrition	Applied Sport and Exercise Physiology
	Exercise for Specific Groups	Sports Coaching
	The Athlete's Lifestyle	

This unit links with the National Occupational Standards (NOS) for:

- Instructing Physical Activity and Exercise at Level 3
- Sports Development at Level 3
- Coaching, Teaching and Instructing at Level 3
- Achieving Excellence in Sports Performance at Level 3.

Essential resources

Learners will need access to suitable facilities for conducting lifestyle analyses and access to suitable groups who could be used as clients.

Employer engagement and vocational contexts

This unit will provide learners with the background knowledge and skills needed to work in the exercise and fitness industry or health promotion. Centres are encouraged to develop links with local health and fitness centres and Primary Care Trusts (PCTs). This could be via talks, demonstrations, workshops or visits.

Indicative reading for learners

Textbooks

American College of Sports Medicine – *ACSM's Guidelines for Exercise Testing and Prescription, 7th Edition* (Lippincott Williams and Wilkins, 2005) ISBN 9780781745901

Bird S R, Smith A and James K – *Exercise Benefits and Prescription* (Nelson Thornes, 1998) ISBN 9780748733156

Coulson M – *The Fitness Instructor's Handbook: A Complete Guide to Health and Fitness – Fitness Professionals* (A&C Black, 2007) ISBN 9780713682250

Franks B D and Howley E T – *Fitness Leader's Handbook* (Human Kinetics Europe, 1998) ISBN 9780880116541

Heyward V H – *Advanced Fitness Assessment and Exercise Prescription* (Human Kinetics, 2006) ISBN 9780736057325

Howley E T and Franks B D – *Health Fitness Instructor's Handbook* (Human Kinetics Europe, 2003) ISBN 9780736042109

Volpe S L et al – *Fitness Nutrition for Special Dietary Needs* (Human Kinetics Europe, 2007) ISBN 9780736048125

Journals

American College of Sport Medicine's Health and Fitness Journal

British Medical Journal

Heathex Specialist

Journal of Physical Activity and Health

Journal of Sports Medicine and Physical Fitness

Websites

American College of Sports Medicine

www.acsm.org

British Nutrition Foundation

www.nutrition.org.uk

Department of Health

www.doh.gov.uk

Food Standards Agency

www.eatwell.gov.uk

Human Kinetics

www.humankinetics.com

The World Health Organisation

www.who.int

Top End Sports

www.topendsports.com

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	designing and using a lifestyle questionnaire to describe the strengths and areas for improvement in the lifestyle of a selected individual
Creative thinkers	designing and using a lifestyle questionnaire to describe the strengths and areas for improvement in the lifestyle of a selected individual providing lifestyle improvement strategies for a selected individual planning a six-week health-related physical activity programme for a selected individual
Reflective learners	designing and using a lifestyle questionnaire to describe the strengths and areas for improvement in the lifestyle of a selected individual
Effective participators	providing lifestyle improvement strategies for a selected individual.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	researching lifestyle factors that have an effect on health researching lifestyle questionnaires
Creative thinkers	practising providing lifestyle improvement strategies practising describing strengths and areas for improvement in the lifestyle of an individual
Reflective learners	practising describing strengths and areas for improvement in the lifestyle of an individual
Team workers	practising providing verbal lifestyle improvement strategies practising using a lifestyle questionnaire to describe strengths and areas for improvement for an individual
Self-managers	providing lifestyle improvement strategies for a selected individual.

● Functional Skills – Level 2

Skill	When learners are ...
ICT – Use ICT systems	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	researching lifestyle factors that have an effect on health designing a lifestyle questionnaire producing a health-related physical activity programme
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	researching lifestyle factors that have an effect on health designing a lifestyle questionnaire
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	researching lifestyle factors that have an effect on health designing a lifestyle questionnaire
ICT – Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> • text and tables • images • numbers • records 	describing lifestyle factors that have an effect on health designing a lifestyle questionnaire producing a health-related physical activity programme
Bring together information to suit content and purpose	describing lifestyle factors that have an effect on health designing a lifestyle questionnaire producing a health-related physical activity programme
Present information in ways that are fit for purpose and audience	describing lifestyle factors that have an effect on health designing a lifestyle questionnaire producing a health-related physical activity programme
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	collecting information on the lifestyle of an individual providing lifestyle improvement strategies for a selected individual describing the strengths and areas for improvement in the lifestyle of a selected individual
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	describing lifestyle factors that have an effect on health
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	describing lifestyle factors that have an effect on health.