

BTEC

# HIGHER NATIONALS

## Sport and Exercise Science



Higher National  
Certificate Lvl 4

# Unit 7: Physical Activity, Lifestyle & Health

<b>Unit code</b>	<b>J/616/0930</b>
<b>Unit level</b>	<b>4</b>
<b>Credit value</b>	<b>15</b>

## Introduction

Lifestyle plays a crucial role in the health, well-being and quality of life of an individual. Typically, individuals who eat a healthy diet, take part in physical activity, drink in moderation, manage their stress levels and do not smoke live longer and cope better with the demands of everyday life. A poor lifestyle can impact on an individual's quality of life and increase their risk of developing a number of physical and mental illnesses that include cancer, obesity, coronary heart disease, anxiety and depression. Leading a healthy lifestyle can, therefore, play a major role in the prevention of such illnesses.

For individuals working in the sport and fitness industry, knowledge of the effects of lifestyle on health and wellbeing is very important, along with an understanding of how to improve the lifestyle of a range of individuals. This would be particularly relevant for individuals seeking a career in fitness and health promotion.

Topics included in this unit are physical activity, stress, diet, drug use, smoking and alcohol consumption and the impact of these factors on the health and wellbeing of an individual. Within this unit, students will explore the relationship between lifestyle, health and wellbeing and will investigate current physical activity guidelines and reasons for physical inactivity in different target groups. Students will also explore behaviour change strategies that can be used to help individuals develop a healthier lifestyle.

On successful completion of this unit, students will be able to use appropriate tools to assess the lifestyle of a range of individuals and design, implement and review lifestyle enhancement programmes. They will be able to reassess the lifestyle of a selected individual following completion of the programme and review the effectiveness of the programme in facilitating behaviour change. Throughout the unit, students will develop skills such as communication, interpretation and analysis which are crucial for gaining employment within the sport and fitness industry and developing academic competence.

## **Learning Outcomes**

By the end of this unit students will be able to:

1. Examine the role of physical activity in the maintenance of a healthy lifestyle
2. Investigate the impact of lifestyle factors and physical inactivity on health and wellbeing
3. Plan lifestyle enhancement programmes for selected individuals
4. Review lifestyle enhancement programmes for selected individuals.

## Essential content

### LO1 Examine the role of physical activity in the maintenance of a healthy lifestyle

#### *Benefits of physical activity:*

Physical benefits – management and prevention of disease, e.g. obesity, coronary heart disease, osteoporosis

Psychological benefits – development of a positive psychological wellbeing, e.g. reducing stress, anxiety and depression and developing self-confidence, self-esteem and a positive self-concept, increase in emotional intelligence

Social benefits, e.g. sense of belonging, development of social relations

#### *Recommended levels of physical activity:*

Use relevant guidelines for levels of physical activity, i.e. ACSM (American College of Sports Medicine) guidelines

### LO2 Illustrate the impact of lifestyle factors and physical inactivity on health and wellbeing

#### *Lifestyle factors:*

Excessive stress – causes, e.g. internal, environmental, personal and occupational, health and wellbeing risks, e.g. hypertension, angina, stroke, heart attack, ulcers, anxiety and low mood

Drug use – smoking (health risks, e.g. coronary heart disease, lung cancer, bronchitis and emphysema, excessive alcohol (health and wellbeing risks, e.g. stroke, cirrhosis, hypertension and depression, recreational drug use (health and wellbeing risks, e.g. high blood pressure, depression and anxiety)

Poor diet – health and wellbeing risks, e.g. obesity (positive energy balance, health risks associated with obesity, e.g. increased cholesterol (LDLs), atheroma, development of arteriosclerosis, Type II diabetes, low self-esteem, negative body image

Factors that affect lifestyle choice – cultural factors (e.g. religious beliefs, fasting), family-related factors (e.g. parental influence on children and young people, impact of being a single parent, financial income), occupational factors (e.g. hours of work, reliance on childcare), social factors (e.g. friends, peer pressure), personal factors (e.g. age, gender, hobbies, interests, injury, illness, disability), educational factors (e.g. school physical education, healthy school dinners, extra-curricular opportunities) and environmental factors (location and proximity to local facilities, quality of local provision)

*Target groups:*

Range of individuals, e.g. adults, young people, children, elderly, minority groups, women and people with a disability

*Physical inactivity:*

Reasons for physical inactivity – religious and cultural reasons, psychological reasons, e.g. social physique anxiety, physical reasons e.g. illness

Health and wellbeing risks, e.g. obesity, hypertension, coronary heart disease, and negative self-concept

### **LO3 Plan lifestyle enhancement programmes for selected individuals**

*Assess lifestyle factors:*

Interview (one-to-one consultation)

Lifestyle questionnaire – levels of physical activity, diet, drug use (smoking, alcohol consumption and recreational drug use) and stress levels

Behaviour change – precontemplation, contemplation, preparation, action and maintenance

Barriers to change

*Plan lifestyle improvement programmes:*

Goal setting – SMART (specific, measurable, achievable, realistic and time-bound) goals (short-, intermediate, long-term).

*Processes of change:*

precontemplation to contemplation, e.g. consciousness raising, environmental reevaluation, dramatic relief, social liberation

contemplation to preparation, e.g. self-re-evaluation

preparation to action, e.g. self-liberation, helping relationships, counter conditioning

action to maintenance, e.g. reinforcement management, stimulus control.

Physical activity changes – unstructured inclusion into everyday life, e.g. using stairs rather than lifts, gardening, vigorous Hoovering, walking to work

Structured changes, e.g. accessing provision in local area (exercise classes, run/walking groups)

Diet changes, e.g. balanced diet to include appropriate levels of macro (carbohydrate, fats and proteins) and micro (vitamins, minerals, fibre), nutrients, reduction in saturated fat, inclusion of unsaturated fat, e.g. fish oils, correct levels of protein, reduction in the intake of high G.I carbohydrates, correct levels of hydration

Following healthy eating guidelines, e.g. Eatwell Plate)

Changes to reduce stress, e.g. inclusion of time for hobbies and socialising

**LO4 Review lifestyle enhancement programmes for selected individuals**

*Methods:*

Interview – one-to-one consultations

Peer and self-evaluation

Lifestyle questionnaires

*Effectiveness:*

Fit for purpose, e.g. modify activities, changes to maintain interest and motivation

Review of goals – short-, intermediate and long-term goals

## Learning Outcomes and Assessment Criteria

Pass	Merit	Distinction
<b>LO1</b> Examine the role of physical activity in the maintenance of a healthy lifestyle		<b>D1</b> Analyse the relationship between physical activity and the development of a healthier lifestyle
<b>P1</b> Describe the physical, psychological and social benefits of physical activity <b>P2</b> Present physical activity guidelines for adults	<b>M1</b> Examine the benefits of meeting physical activity guidelines for adults	
<b>LO2</b> Investigate the impact of lifestyle factors and physical inactivity on health and wellbeing		<b>D2</b> Evaluate the relationship between lifestyle, health and wellbeing
<b>P3</b> Explain the impact of stress, smoking, excessive alcohol consumption, poor diet and physical inactivity on health and wellbeing <b>P4</b> Identify the reasons for physical inactivity for a range of individuals	<b>M2</b> Assess factors that affect lifestyle choice and the impact they have on health and wellbeing	
<b>LO3</b> Plan lifestyle enhancement programmes for selected individuals		<b>D3</b> Justify the design of a lifestyle enhancement programme and use of behaviour change strategies for a selected individual
<b>P5</b> Compare and contrast the lifestyle of selected individuals <b>P6</b> Plan a lifestyle enhancement programme for a selected individual	<b>M3</b> Analyse the design of a lifestyle enhancement programme for a selected individual, commenting on behaviour change strategies	
<b>LO4</b> Review lifestyle enhancement programmes for selected individuals		<b>D4</b> Justify the recommendations made in relation to the development of a healthier lifestyle
<b>P7</b> Implement the lifestyle enhancement programme for a selected individual <b>P8</b> Review the lifestyle enhancement programme for a selected individual, identifying strengths and areas for improvement	<b>M4</b> Examine the strengths and areas for improvement of the lifestyle enhancement programme for a selected individual, making recommendations for future development	

## Recommended resources

### Textbooks

ACSM (USA) (2013) *ACSM Guidelines for Exercise Testing and Prescription*, 9<sup>th</sup> edition. Lippincott, Williams and Wilkins.

COULSON, M. (England) (2007) *The Fitness Instructor's Handbook: A Complete Guide to Health and Fitness*. A&C Black.

HEYWARD, V.H. (USA) (2006) *Advanced Fitness Assessment and Exercise Prescription*. Human Kinetics.

VOLPE, S.L., SABELAWSKI, S.B. & MOHR, C. (Europe) (2007) *Fitness Nutrition for Special Dietary Needs*. Human Kinetics.

### Journals

*American College of Sport Medicine's Health and Fitness Journal*

*British Medical Journal*

*Journal of Physical Activity and Health*

*Journal of Sport and Exercise Psychology*

*Journal of Sports Medicine and Physical Fitness*

### Websites

[www.nhs.uk](http://www.nhs.uk)

Physical and Psychological illness, signs, symptoms and treatment

[www.nutrition.org.uk](http://www.nutrition.org.uk)

British Nutrition Foundation

[www.acsm.org](http://www.acsm.org)

American College of Sports Medicine

[www.who.int](http://www.who.int)

World Health Organisation

[www.doh.gov.uk](http://www.doh.gov.uk)

Department of Health



## **Links**

This unit links to the following related units:

*Unit 1: Nutrition*

*Unit 2: Fundamentals of Sport & Exercise Psychology*

*Unit 3: Anatomy & Physiology*

*Unit 8: Lifestyle Coaching*

*Unit 18: Exercise Prescription*

*Unit 19: Contemporary Issues in Health*

*Unit 20: Health Community Engagement*

*Unit 21: Sport & Exercise for Specific Groups*

*Unit 22: Physical Education & School Sport*

*Unit 27: Advanced Nutrition*

*Unit 36: Applied Lifestyle Coaching*