
7 Unit 7: Health as a Lifestyle Choice

[AS level, double award, optional, internally assessed]

7.1 ABOUT THIS UNIT

This AS level unit is an optional part of the double award only and is internally assessed.

This unit enables you to explore health as a lifestyle choice for the individuals at all life-stages. You will study the nutritional value of food and the dietary requirements of individuals from diverse backgrounds throughout their various life-stages. You will learn about current dietary guidelines. You will also investigate the way that exercise can have a positive effect on a person during different life-stages. You will explore different types of physical activity and the way they can affect the physical, mental and social health of individuals and the concepts involved in devising an appropriate exercise programme for an individual.

This unit has links with Unit 3: *Promoting good health*, Unit 8: *Complementary therapies*, Unit 12: *Anatomy and physiology in practice*, and Unit 13: *Child development*. Although this unit does not link directly to the NVQs in Providing Health, Social and Protective Services, it provides a broad introduction to the qualifications involving Care, Caring for Children and Young People and Early-Years Care and Education at Levels 2 and 3.

This unit is assessed through your portfolio work. The mark on that assessment will be your mark for the unit. You will produce a report on care workers which explores healthy-lifestyle choices, devising an exercise programme for **one** individual. Your evidence will include:

- understanding of the positive effects of exercise on the physical, mental and social health of individuals;
- understanding of the diet of the individual, making recommendations for improvements based on current dietary guidelines;
- relevant research and analysis when planning and designing a **three**-week exercise programme for the individual;
- monitoring and evaluation of the likely success and effectiveness of the diet recommendations and exercise programme on the individual.

7.2 WHAT YOU NEED TO LEARN

You need to learn about:

- nutritional value of food and the dietary function of nutrients;
- current dietary guidelines to promote the health of individuals;
- positive effects of exercise;
- health and safety considerations when designing an exercise programme;
- how diet and exercise interrelate to affect health.

7.2.1 Nutritional Value of Food and the Dietary Function of Nutrients

You need to learn about the dietary functions of the main nutrients in food and the contribution that food and food products make to the diets of individuals.

This will include an understanding of the nature and the dietary function of:

- macro-nutrients:
 - proteins high and low biological value,
novel sources;
 - fats saturated,
monosaturated,
polyunsaturated;
 - carbohydrates starches and sugars;
- micro-nutrients:
 - vitamins water soluble B and C,
fat soluble A, D, E and K;
 - minerals calcium,
iron,
phosphorus,
sodium,
potassium.

You also need to gain a broad understanding of the foods that provide the main sources of nutrients in the diet and related diseases caused by deficiency or over consumption; also, the essential roles of water and non-starch polysaccharide (NSP/dietary fibre). You also need to know about the role of additives in prepared food products.

7.2.2 Current Dietary Guidelines to Promote the Health of Individuals

You need to know about the current dietary guidelines in the United Kingdom and the range of healthy-eating initiatives generated by other agencies. These may include:

- initiatives like The Healthy Eating Plate 1991/Take 5 Campaign;
- United Kingdom Dietary Guidelines as stated in Saving Lives: Our Healthier Nation 1999;
- current trends in eating patterns and in the choice of food using sources such as The Food Standards Agency and The National Food Survey.

You need to understand the current government guidelines about the provision of healthy diets and demonstrate knowledge of the trends in food choice and eating patterns in the UK, e.g. the increased role of prepared foods in the diet having implications for the nutritional adequacy of individual diets. This includes:

- specific needs, e.g. infants, children, adolescents, adults (active, sedentary), older people, pregnant women, nursing mothers;
- DRVs (Dietary Reference Values) related to age, gender, activity, state of health;
- meeting religious beliefs/lifestyle choices;
- specific diet-related disorders, e.g. diabetes mellitus, high blood pressure, osteoporosis, irritable bowel syndrome.

You need to learn about the nutritional requirements and dietary factors that determine the diets of individuals of all ages and from diverse backgrounds. You need to be aware that some individuals do not readily understand the concept of the healthy diet and that there may be difficulties with availability and access to a range of foods.

You need to understand how to make modifications to the diets of individuals with specific requirements in order to provide them with an optimum diet.

You also need to understand about individuals who chose to modify their diet, either because of their religious belief or as a lifestyle choice. Such dietary modification may include increased or decreased nutrient intake, controlled nutrient intake, nutrient avoidance, or dietary supplementation.

You also need to be aware of the increased role and issues relating to the use of prepared foods.

7.2.3 Positive Effects of Exercise

You need to have a sound understanding of improvements exercise can make to the following:

- physical health, e.g. fitness, muscular strength, flexibility, weight control, coronary heart disease, high blood pressure, osteoporosis;
- mental health, e.g. sense of well-being, self-esteem, stress relief;
- social health, e.g. friendship network.

You need to explore the cardiovascular, skeletal and muscular systems and the positive effect regular exercise can have in the prevention of illness/diseases associated with these organs and the short- and long-term effects of cardiovascular, muscular strength, muscular endurance and flexibility exercises.

You need to explore concepts such as mental alertness, motivation and interest in life. You also need to know about the need for exercise to be an integral part of life; that short bursts once a year will not bring about lasting benefits.

You need to understand the benefits of regular exercise in a range of individual circumstances.

7.2.4 Health and Safety Considerations when Designing an Exercise Programme

You need to design a **three**-week exercise programme for **one** individual considering the following:

- assessment of fitness level of the individual before and after the programme, e.g. standardised test such as sit and reach;
- safe environments, e.g. inclement weather, condition of pitches, condition of equipment;
- correct equipment, e.g. goal keeping gloves, shin pads;
- suitable clothing, e.g. no jewellery, hair tied back;
- suitability of exercise for intended purpose;
- correct preparation, e.g. warm-up, cool-down;

- principles of training, e.g. specificity, overload, progression;
- appropriate monitoring techniques;
- evaluation.

You need to take into account the specific needs of the chosen individual and consider:

- starting level of fitness (as found in completed standardised fitness tests);
- aim of the programme, e.g. weight loss, toning;
- time available.

You need to choose **two** area of fitness to improve, e.g. aerobic (cardiovascular), muscular strength, muscular endurance or flexibility and you need to choose **two** types of training such as continuous, interval, fartlek and weight-training and explain your rationale behind selection or omission.

In your programme you need to convey 'who, what, when, where and why.'

Your evaluation needs to include your reflection on the exercise programme and a comparison of the 'before' and 'after' test results, with an explanation of the results. You need to consider how you would change the exercise programme if it was repeated and what the short- and long-term effects would be on the individual if the programme was continued.

7.2.5 How Diet and Exercise Interrelate to Affect Health

You need to know that diet and exercise can work together to give a healthier lifestyle, i.e. how each benefits the other.

7.3 ASSESSMENT EVIDENCE GRID

Please see over.

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What you need to do:				
<p>You need to produce a report on care workers which explores healthy-lifestyle choices, devising an exercise programme for one individual [50 marks]. Your evidence needs to include:</p> <p>AO1: understanding of the positive effects of exercise on the physical, mental and social health of individuals [15]; AO2: understanding of the diet of the individual, making recommendations for improvements based on current dietary guidelines [15]; AO3: relevant research and analysis when planning and designing a three-week exercise programme for the individual [10]; AO4: monitoring and evaluation of the likely success and effectiveness of the diet recommendations and exercise programme on the individual [10].</p>				
How you will be assessed:				
Assessment Objective	Mark Band 1	Mark Band 2	Mark Band 3	Mark Awarded
AO1	You show a basic knowledge and understanding of the positive effects of exercise on the physical, mental and social health of individuals; [0 1 2 3 4 5]	you demonstrate a sound knowledge and understanding of the positive effects of exercise on the physical, mental and social health of individuals; [6 7 8 9 10]	you demonstrate in-depth knowledge and understanding of the positive effects of exercise on the physical, mental and social health of individuals. [11 12 13 14 15]	/15
AO2	You show, with guidance, a basic understanding of the nutritional content of food, the dietary function of both macro- and micro-nutrients and the dietary needs of the individual, making basic recommendations for improvements based on current dietary guidelines; you write in a manner which is adequate to convey meaning, although it is expressed in a non-specialist manner; [0 1 2 3 4 5]	you show a sound understanding of the nutritional content of food, the dietary function of both macro- and micro-nutrients and the dietary needs of the individual, making sound recommendations for improvements based on current dietary guidelines; you write in a manner which conveys meaning, using specialist vocabulary with few errors/inaccuracies; [6 7 8 9 10]	you show, accurately and independently, a thorough understanding of the nutritional content of food, the dietary function of both macro- and micro-nutrients and the dietary needs of the individual, making detailed recommendations for improvements based on current dietary guidelines; you write in a manner which conveys appropriate meaning, using specialist vocabulary with accuracy; there will be no errors/inaccuracies. [11 12 13 14 15]	/15
AO3	You use a limited range of relevant information sources to collect information to plan and design a three -week exercise programme (to include two types of exercise), applying basic analytical skills to show how the programme meets the needs of the individual; [0 1 2 3 4]	you use a range of information sources to collect information to plan and design a three -week exercise programme (to include two types of exercise), applying sound analytical skills to describe how the programme meets the needs of the individual; [5 6 7]	you undertake research using a variety of techniques and sources to carry out an in-depth analysis when devising a three -week exercise programme (to include two types of exercise), applying sound analytical skills to show how the plan meets the needs of the individual. [8 9 10]	/10
AO4	You carry out a basic evaluation of the evidence collected during monitoring, drawing basic conclusions as to the likely success and effectiveness of the diet recommendations and exercise programme on the individual; [0 1 2 3 4]	you carry out an evaluation of the evidence collected during monitoring to draw conclusions as to the likely success and effectiveness of the diet recommendations and exercise programme on the individual; [5 6 7]	you carry out a comprehensive evaluation of the evidence collected during monitoring to draw valid conclusions as to the likely success and effectiveness of the diet recommendations and exercise programme on the individual. [8 9 10]	/10
Total mark awarded:				/50

7.4 GUIDANCE FOR TEACHERS

7.4.1 Guidance on Delivery

You may find it helpful to invite specialists to your centre to discuss the issues in this unit with candidates. Specialists might include environmental health officers, home economists, dietitians, health promotion officers and health visitors. Work experience placements may introduce candidates to individuals with dietary restrictions or candidates may have personal contacts with people who exclude certain foods. Research into groups with special dietary requirements may be undertaken by personal interview, case study or secondary research. Permission must be gained and confidentiality respected if personal interviews are used.

Nutritional value of food and the dietary function of nutrients

Candidates need to have a broad overview of the nature and function of each nutrient and the main food sources of the nutrient in the diet.

Positive effects of exercise

Evidence for this is most likely to be collected from a range of primary and secondary sources. These could include exercise promotion campaigns as well as texts, journals and the Internet. Another useful source of information could be exercise professionals. It is also likely that in some cases the candidate's own experiences can be used.

Candidates are not expected to study body systems in detail.

Health and safety considerations when designing an exercise programme

Candidates need to understand fully the need to keep individuals safe during all stages of an exercise programme.

They need to produce a detailed warm-up/cool-down routine which demonstrates theoretical research. They could use primary sources such as aerobics instructors to investigate factors that must be included in a safe exercise programme.

Candidates could display an overview of the programme as a grid that shows the activities to be performed. A more in-depth grid for each aspect may be needed in addition.

7.4.2 Guidance on Assessment

It needs to be stressed that you determine only the *mark* for a candidate's portfolio evidence and not the *grade* which will be determined by OCR.

Regular, early and constructive feedback to candidates on their performance is essential and crucial. Help with planning and structuring their portfolio work in a logical manner throughout the course will lead to better understanding of their work and is likely to achieve higher marks.

Giving candidates deadlines for the completion of various sections of their work, and encouraging them to adhere to them, is also essential if candidates are not going to rush to complete and possibly finish up with marks below their potential.

You need to mark each portfolio according to the assessment objectives and content requirements in the *Assessment Evidence Grid* within each portfolio (Section 7.3)

The information on this *grid* will eventually be transferred onto a *Unit Recording Sheet* to be attached to the front of each candidate's piece of work at the point when the work is submitted for moderation. A *Coursework Administration Pack* will be supplied, containing all relevant *Unit Recording Sheets*. Where marking for this unit has been carried out by more than **one** teacher in a centre, there must be a process of internal standardisation carried out to ensure that there is a consistent application of the criteria as laid down in the *Assessment Evidence Grids*.

Each row in the *grid* comprises a strand showing the development of an assessment objective, each row corresponding to an assessment objective descriptor in the banner (the top section of the *grid*).

The maximum mark for each strand is shown in the far right hand column of the *grid* and this maximum mark is further broken down into a number of mark bands across each row with a range of descriptors.

You use your professional judgement to determine which descriptor in a strand best suits the individual candidate's work and from the range of marks available within that particular mark band, you circle the mark that best fits the work. You then record this mark in the column headed *Mark*.

You need to use the full range of marks available to you. You need to award full marks in any strand for work which fully meets the criteria. This is work which is the best one could expect from candidates working at AS level.

However, for strands which include a quantified element, e.g. **two** care workers or **four** therapies, and where a candidate's evidence includes less than the number specified, or includes the correct number but at varying levels of quality, you will use your professional judgement to allocate an appropriate mark. It is the *quality* of the evidence that is paramount rather than the *quantity*, although, in such circumstances, candidates will be unable to access the highest mark band for that strand.

Only **one** mark per strand/row will be entered. The final mark for the candidate is out of a total of **50** and is found by totalling the marks for each strand.

The further guidance below amplifies the criteria in the *Assessment Evidence Grid* and will help you to determine the appropriate mark to be awarded for each strand.

Amplification of Criteria		
AO	Mark Band	Characteristics of the work one may expect to see at this mark band can be summarised as follows:
AO1	1	<p>Candidates will produce a factual account based on the collection of evidence to show the positive effects of exercise on individuals' physical, mental and social health;</p> <p>this will be obtained from primary sources using questionnaires or interviews of fitness-industry professionals or secondary sources via text books and the Internet;</p> <p>candidates will show a basic understanding of physical, mental and social health and how exercise can have a positive effect;</p> <p>the evidence will lack detail about the effects on individuals and will contain some omissions and/or inaccuracies;</p>
	2	<p>candidates will produce a factual account showing sound understanding of the positive effects of exercise on individuals' physical, mental and social health;</p> <p>illustrations will be used to show more in-depth knowledge of physical effects;</p> <p>candidates will draw conclusions on how exercise can be integrated into everyday life;</p> <p>candidates will show sound understanding about physical, mental and social health and how exercise can have a positive effect;</p> <p>the evidence will be fairly detailed about the effects on individuals and there will be few omissions and/or inaccuracies within the evidence;</p>
	3	<p>candidates will synthesise a range of information to show the effects of exercise on individuals' physical, mental and social health;</p> <p>candidates will, for example, produce a bibliography and indicate within the text from where information has been obtained;</p> <p>the factual account will be detailed and will show a high level of understanding about the effects of exercise on individuals' physical, mental and social health;</p> <p>clear and accurate conclusions will be drawn relating to the effects on daily living;</p> <p>evidence shows a high level of understanding and there will be no omissions or inaccuracies within the evidence.</p>
AO2	1	<p>Candidates will show a basic understanding of the nature and dietary function of macro- and micro-nutrients;</p> <p>there will be limited evidence describing foods that provide the main sources of nutrients;</p> <p>candidates' understanding of the essential roles of water and non-starch polysaccharide (NSP/dietary fibre) will be limited;</p> <p>candidates will describe basically the dietary needs for the individual;</p> <p>there may be little, if any, consideration of diverse backgrounds or specific dietary variation where modification of the diet will be necessary;</p> <p>recommendations for improvements will be realistic but lacking detail;</p> <p>the evidence will be limited and contain omissions and/or inaccuracies;</p> <p>candidates will write in a manner which is adequate to convey meaning, although it will be expressed in a non-specialist manner;</p>

AO	Mark Band	Characteristics of the work one may expect to see at this mark band can be summarised as follows:
	2	<p>candidates will show a sound understanding of the nature and dietary function of macro- and micro-nutrients;</p> <p>candidates will include a detailed description of foods that provide the main sources of nutrients;</p> <p>the essential roles of water and non-starch polysaccharide (NSP/dietary fibre) will be clearly described;</p> <p>candidates will thoroughly describe the dietary needs for the individual;</p> <p>recommendations for improvements will be detailed, showing a sound understanding of the needs of the individual and realistic changes which could be made;</p> <p>justification for recommendations will be included;</p> <p>the evidence will show understanding and contain few minor omissions and/or inaccuracies;</p> <p>candidates will write in a manner which conveys meaning, using specialist vocabulary with few errors/inaccuracies;</p>
AO2	3	<p>candidates' evidence will be comprehensive and demonstrate a thorough understanding of the nature and dietary function of all macro- and micro-nutrients;</p> <p>candidates will include a detailed analysis of foods that provide the main sources of nutrients;</p> <p>the essential roles of water and non-starch polysaccharide (NSP/dietary fibre) will be clearly explained;</p> <p>candidates will explain the dietary needs for the individual;</p> <p>recommendations for improvements will be thorough, showing a sound understanding of the needs of the individual and realistic changes which could be made;</p> <p>justification for recommendations will be detailed;</p> <p>the evidence will show synthesis and understanding; there will be no omissions and/or inaccuracies within the evidence;</p> <p>candidates will write in a manner which conveys appropriate meaning, using specialist vocabulary with accuracy – there will be no errors/inaccuracies.</p>
AO3	1	<p>Candidates will select one individual and devise a three-week exercise programme;</p> <p>candidates will include basic information on the principles of exercise such as – specificity, overload and progression;</p> <p>there will also be a basic variety of types of exercise, to include two of the following – continuous, interval, fartlek and weight training;</p> <p>candidates will show limited evidence of the programme being devised specifically for the individual, e.g. aims of the individual, available time etc.;</p> <p>candidates will select two of the following types of fitness – aerobic (cardiovascular), muscular strength, muscular endurance or flexibility;</p> <p>an advice sheet on safety factors to be considered whilst exercising will show basic understanding and the evidence will lack detail;</p> <p>a basic warm-up and cool-down will show limited understanding of physiological benefits;</p> <p>the programme will lack understanding and detail;</p> <p>there will be omissions and/or inaccuracies within the evidence;</p>

AO	Mark Band	Characteristics of the work one may expect to see at this mark band can be summarised as follows:
AO3	2	<p>candidates will include sound information in the three-week exercise programme;</p> <p>there will also be a variety of types of training, to include two of the following – continuous, interval, fartlek and weight training;</p> <p>candidates will also show sound evidence of the programme being devised specifically for one individual, taking into consideration the aims of the individual, available time etc.;</p> <p>fitness tests are described with the use of diagrams;</p> <p>an advice sheet on safety factors to be considered whilst exercising will show sound understanding and the evidence will use a variety of sources;</p> <p>a warm-up and cool-down will show sound understanding of physiological benefits;</p> <p>candidates will give details of a warm-up and cool-down incorporating a 10 minute pulse raiser, and mobility and stretching exercises of all major joints and muscles, with labelled diagrams to support descriptions;</p> <p>there will be few omissions and/or inaccuracies within the evidence;</p>
	3	<p>the three-week exercise programme will be detailed and show evidence of a wide variety of sources;</p> <p>evidence to show the sources used could be, for example, presented as a bibliography and referenced within the context of the work;</p> <p>there will be a detailed explanation and rationale as to the selection and duration of activities, with supporting in-depth grids for each of the two types of fitness selected for improvement;</p> <p>candidates will show a high level of understanding in their detailed analysis of the selection of appropriate exercises;</p> <p>candidates will use score tables to indicate standardised levels of fitness of the individual and identify strengths and weaknesses;</p> <p>the programme will show depth of understanding and detail;</p> <p>there will be no omissions or inaccuracies within the evidence.</p>
AO4	1	<p>Candidates will complete a basic evaluation of the likely effects of the diet recommendations and exercise programme;</p> <p>they will draw basic conclusions as to the effectiveness and draw simple, but realistic, conclusions that will involve reflection and simple analysis;</p> <p>the analysis will include information relating to the benefits to the individual with reference to the effects on the physical health in the long-term, but this will lack detail;</p> <p>they will draw basic conclusions when reflecting on how they would change the programme if they were devising it again;</p> <p>the analysis is limited and more in the form of statements than analytical judgement;</p> <p>there will be omissions and/or inaccuracies within the evidence;</p>

AO	Mark Band	Characteristics of the work one may expect to see at this mark band can be summarised as follows:
AO4	2	<p>candidates will complete a sound evaluation of the likely effects of the diet recommendations and exercise programme;</p> <p>they will draw sound conclusions as to the effectiveness of these, producing charts showing percentage improvements in each area;</p> <p>the analysis will include information relating to the benefits to the individual, with reference to beneficial effects on their physical health in the long-term;</p> <p>they will draw sound conclusions when reflecting on how they would change the programme if they were devising it again;</p> <p>the analysis will show the ability to reflect and to make reasonable judgements in some detail;</p> <p>there will be few omissions and/or inaccuracies within the evidence;</p>
	3	<p>candidates will evaluate in depth, forming reasoned judgements showing a high level of understanding of the likely effects of the diet recommendations and exercise programme, as evidenced in a detailed account;</p> <p>candidates will reflect on the three week programme and its strengths and areas for improvement in detail;</p> <p>they will offer comprehensive advice to the individual for the future;</p> <p>the analysis is detailed and shows candidates' ability to reflect and make reasoned judgements;</p> <p>there will be no omissions or inaccuracies within the evidence.</p>

7.4.3 Resources

Organisations	YMCA BAWLA RSA PEA BAALPE Local Health Authorities health promotion unit independent health and fitness clubs primary care groups
Publications	Food Industry Publications, Sports Industry Magazines,
Textbooks	The Bender Food Tables PE to 16 PE for You Advanced Level Physical Education Advanced Studies in Physical Education Physical Education Study of Sport.
Websites	The British Nutrition Foundation http://www.nutrition.org.uk The Department of Health http://www.doh.gov.uk The Food Standards Agency http://www.foodstandards.gov.uk The National Food Survey http://www.defra.gov.uk/esg/Work_htm/Index/food.htm Saving Lives: Our Healthier Nation http://www.ohn.gov.uk Sport-specific and fitness sites, Local Health Authority