



Physical Education

RAYNES
PARK SIXTH FORM

Discursive Writing Assignment

Health and lifestyle
modification



Health and lifestyle modification

The health and fitness industry is concerned with helping to support clients to increase their fitness levels and also ensuring a client is in appropriate health to take on a fitness programme. To work in the health and fitness industry, staff need to know how to assess clients and then be able to plan appropriate training programmes to take into account individual needs.

In this writing project, you are taking on the role of a fitness coach and will explore how to make judgements on a specific individual's current lifestyle and then suggest modifications to help improve the individual's fitness, health and overall well-being.



Task 1 - Positive lifestyle factors and their effects on health and well-being

Before you begin, you must have a clear idea of what is meant by the term 'Health' and understand what positive lifestyle factors are, and the impact they have on our health.

Carry out your own investigation by completing the tasks below. You will need to make a note of the websites, articles, videos and resources you use to do this on the research record (1) on page 6. *(Note: There is an example for the first task for you on the sheet)*

- **What is meant by the term Health?**

Evidence suggests that to lead a healthy lifestyle you must follow a balanced diet and participating in regular physical activity.

- **What are the physical benefits to exercising? What are the psychological benefits?** *(This could be done as mindmaps on the next page)*
- **What is a Balanced diet? (Hint: research eatwell plate). What are the benefits of a healthy diet? Name as many as you can.** *(This could be a mindmap on the next page)*
- **What are the current government (UK) recommendations/guidelines for physical activity and healthy eating?**

Research Record (1)

	Title of book, website, article video etc	Summary of the information learnt:
1	What is Health? https://8fit.com/lifestyle/the-world-health-organization-definition-of-health/	
2		
3		
4		
5		
6		
7		

Task 2 – Negative lifestyle factors and their effects on health and well-being

As an introduction to the task please watch each of the videos.

What is Cancer? https://www.youtube.com/watch?v=SGaQ0WwZ_0I

What is Coronary Heart Disease? <https://www.youtube.com/watch?v=fu0TEMNrfgs>

What is types 2 diabetes? <https://www.youtube.com/watch?v=nBJN7DH83HA>

The table below shows some negative factors on someone's lifestyle.

Negative factor	Possible health risks:
Smoking	CHD, lung cancer
Alcohol	?
Stress	?
Lack of sleep	?
Sedentary lifestyle	Obesity, type II diabetes

Carry out your own investigation and complete the tasks below. You will need to make a note of the websites, articles, videos and resources you use to do this on the research record (2) on page 10.

Describe each of the negative lifestyle factors and how it leads to each of the possible health risks.

Describing each of the health risks.

Feel free to use the next free pages to record your information.

Task 2 - Negative lifestyle factors and their effects on health and well-being

(Notes):

Smoking	
Alcohol	
Stress	
Lack of sleep	
Sedentary lifestyle	

Task 2 – Negative health effects

CHD	
Bronchitis	
Lung cancer	
Hypertension	
Stomach ulcers	
Obesity	
Depression	
Type II diabetes	

Research Record (2)

	Title of book, website, article video etc	Summary of the information learnt:
1	What is Cancer? https://www.youtube.com/watch?v=SGaQ0WwZ_0I	
2	What is Coronary Heart Disease? https://www.youtube.com/watch?v=fu0TEMNrfgs	
3		
4		
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6		
7		
8		

Task 3 - Self-reflection task

Before progressing any further, this is a good point to take a moment to reflect on your work so far, whilst you await feedback on your completed sheets you have just submitted.

1. How are you researching each of the tasks? What resources are you mostly using and why?
1. How easy have you found it to carry out your own research?
1. How disciplined have you been in filling in your research record as you go?
1. What views are you beginning to form in relation to fitness training?

Task 4 – Lifestyle modification

Despite the strong case for keeping active, many people find it difficult to take up exercise. For some people exercise conjures up unpleasant thoughts, such as boring exercise classes, or rough competitive sports with a risk injury.

Carry out your own investigation, looking at ways in which lifestyle changes can be made by answering the following questions:

- What can you do at home?
- What can you do at work?
- What can you do in your leisure time?
- What about modes of transport?

Use the next page to input the answers to the questions above.

You will need to make a note of the websites, articles, videos and resources you use to do this on the research record (3) on page 19.

Task 4 – Lifestyle modifications

Strategies to increase physical activity levels – At home.

Strategies to increase physical activity levels – At work.

Strategies to increase physical activity levels – Leisure time.

Strategies to increase physical activity levels – Mode of transport

Task 5 – Lifestyle modifications part 2

Apart from making changes to level of physical activities some people will need to make of lifestyles changes to prevent developing dangerous diseases, which ultimately could end with them losing their life.

Over the next few pages, describe different methods that are used to combat smoking, excessive alcohol consumption and stress.

Task 5 – Lifestyle modifications part 2

Strategies to stop smoking

Acupuncture	
Quit kit support packs	
Nicotine replacement therapy	
NHS smoking helpline	
NHS smoking services	

Task 5 – Lifestyle modifications part 2

Strategies to reduce alcohol consumption

Self help groups	
Alternative treatments	
Counselling	

Task 5 – Lifestyle modifications part 2

Strategies to improve stress management

Assertiveness training	
Relaxation techniques	
Positive self-talk	
Goal setting	
Physical Activity	

Research Record (3)

	Title of book, website, article video etc	Summary of the information learnt:
1		
2		
3		
4		
5		
6		
7		
8		

Task 6 – Lifestyle write up!

Time to put everything together from what you have learnt!!!

You have secured a position as an assistant community instructor at a local tennis club as part of your work experience.

You have been asked to design a presentation on general health leaflet on general health and well-being to give out as part of new members induction to the tennis club.

Your leaflet must address the following key points:

- Positive lifestyle factors
- Negative lifestyle factors
- Lifestyle modification techniques

For the information you have already researched on all three points and demonstrate you understand what each of the three points mean and how they may be applicable to tennis players at the club.

You will need to outline:

- the importance of the positive lifestyle factors and how they might benefit performance
- how the negative factors can contribute to an unhealthy lifestyle and a likely decrease in performance
- how lifestyle modification techniques may help reduce unhealthy practices.

Lifestyle leaflet

Lifestyle leaflet

Task 7 – Health monitoring tests

Before planning a training programme for a client, you should also do some health monitoring tests. These include calculating the blood pressure, heart rate, body mass index (BMI) and waist-to-hip ratio.

It is important to follow the correct protocol when undertaking health monitoring tests. If you do a test one way and then re-do it in a different way, the results will be invalid and you will not be able to compare against normative data.

For this next piece of work you need to complete each of the following pages, for each of the health monitoring tests.

You will need to make a note of the websites, articles, videos and resources you use to do this on the research record (4) on page 30.

Research Record (4)

	Title of books, website, video etc	Summary of the information learnt:
1		
2		
3		
4		
5		
6		
7		

Task 8 - Nutrition

Sports nutrition plays a key role in optimising the beneficial effects of physical activity, whether you're a bodybuilder, professional athlete in training or exercising to improve your mental and physical health.

Making informed decisions with your nutrition and hydration can result in improved performance, injury prevention and quicker recovery but it's difficult to know where to start with so much conflicting information readily available.

Use the internet to research the task below, describe each of the following in as much detail as possible:

1. What is a balanced diet (eatwell plate)
2. What are benefits of a healthy diet?
3. Describe each of the Macronutrients (carbohydrates, fats, protein), and sources of food for each one.
4. Describe each of Micronutrients (vitamins A, B, C and D, minerals calcium, iron), and sources of food for each one.
5. Hydration (requirements of fluid intake).
6. The effects on performance of dehydration and hyperhydration and the signs and symptoms of each.

Useful links:

<https://www.nhs.uk/live-well/eat-well/the-eatwell-guide/>

<https://www.gov.uk/government/publications/the-eatwell-guide>

<https://www.nutrition.org.uk/healthyliving/basics/exploring-nutrients.html>

Research Record (5)

	Title of books, website, video etc	Summary of the information learnt:
1		
2		
3		
4		
5		
6		
7		

Task 9 – What have you learnt?

You have covered areas including lifestyle factors (positive and negative), lifestyle modification strategies, health monitoring tests and nutrition.

You will now put everything you have learnt together in order to evaluate your first ever client. You will be given information on their lifestyle and be expected to write a detailed report outline the issues, your concerns for their health and what it can lead to, and how you would address all of these to improve the health of your client.

To begin with, you will be given the data in sections with questions to answer before putting everything together for your final report that should be between 1000 to 1500 words.

Use all of the research and information you have written, logged and saved to help you answer all of the questions in this section.

The Scenario

Mr Mann is 30 years old and works 9 hours a day in an office. He does not take part in any exercise and often has to do more work when he gets home.

He catches the bus to work each day, a journey of 3 miles. He has recently noticed that he is gaining weight. He works with Miss Tibbs who exercises regularly and seems to be fitter, healthier and happier than him. Miss Tibbs suggests that Mr Mann joins her gym and trains for an aerobic endurance event.

Mr Mann decides to join the gym and takes part in a fitness assessment. As part of the fitness assessment he will be given a training programme to follow. Mr Mann has previously completed a PAR-Q form and has indicated that he has no medical conditions and is fit to take part in physical activity.

Highlight key words and phrase about Me Mann's lifestyle that will be a factor, either positive or negative. Then answer the questions on the next page.

From the information given in the scenario, what could some of the key lifestyle factors be? (positive and negative)?

Lifestyle factors

Mr Mann completed a questionnaire on his health review the results from below

Section 4: Your lifestyle
Please answer the following questions to the best of your knowledge.
1. How many units of alcohol do you drink in a typical week? 29
2. Do you smoke? No if yes, how many a day?
3. Do you experience stress on a daily basis? Yes If yes, what causes you stress (if you know)? Tight deadlines at work
4. On average, how many hours sleep do you get per night? 6

What are the lifestyle factors identified in section 4? What are the effects of each one?

Health monitoring results

Mr Mann completed the health monitoring test review the results from below.

Section 5: Health monitoring tests	
○ Test results	
Test	Result
Blood Pressure	135/88 mmHg
Resting Heart Rate	85 bpm
Body Mass Index	32
Waist-to-Hip Ratio	1.3

What do the results tell us about Mr Mann's health? Mention the positives and negatives.

Nutrition

Mr Mann has provided a diary of what he ate over a two day period.

Day 1	Breakfast	Lunch	Dinner	Snacks
Y/N	N	Y	Y	Y
Time of day		12.30pm	7pm (ish)	Different times in day - normally - morning - afternoon - evening
Food intake		Ham and Cheese Baguette Packet of crisps Cake	Takeaway - fish and chips	A banana Chocolate bar Crisps
Fluid intake	Coffee x3 cups, Can of fizzy drink x2, Small bottle of water, 3 pints of beer			

Day 2	Breakfast	Lunch	Dinner	Snacks
Y/N	N	Y	Y	Y
Time of day		12.30pm	7pm (ish)	Different times in day - normally - morning - afternoon - evening
Food intake		Chicken Caesar Baguette Packet of crisps Chocolate bar	Takeaway - 12" Pepperoni Pizza and Garlic bread	An apple Chocolate bar Popcorn
Fluid intake	Coffee x3 cups, Can of fizzy drink x1, Small bottle of water x2, 3 pints of lager			

From the nutritional information, what is the issues with Mr Mann's diet?

Modifications

What changes would you like to make to Mr Mann's lifestyle?
How will you go about this? What strategies would you use?



Task 12 – Feeding back to Mr Mann

Essay plan

Now you have collated information on Mr Mann's lifestyle habits and how you in

Planning your answers is a crucial part in essay writing, yet it is the step that is often missed out by students! Get into the habit now, because a well planned essay will always be better than an unplanned one!

Paragraph	Content
Introduction	What is this report about?
1	What were your initial findings from the scenario?
2	Lifestyle factors
3	Health monitoring results? Why are some of the results and issues? What negative effects can they have on the body?
4	
5	
6	
7	

Example

Task 10 - Essay plan

Paragraph	Content
Introduction	
1	
2	
3	
4	
5	
6	
7	
Conclusion	

Task 11 - Self-reflection task

Before progressing any further, this is a good point to take a moment to reflect on your work so far, whilst you await feedback on the plan you have just submitted.

How did you decide which points to include/exclude?

What has been the main findings from your research which has led you to reach your overall conclusion?

What skills has this assignment taught you which will help you with further education (both at BTEC National and beyond)

Task 12 - The write up!

You are now ready to write up. You the title below:

Evaluating Mr Mann's health and lifestyle

Please submit your assignment to Mr Sanderson:

jsanderson@raynespark.merton.sch.uk

Knowledge- based project Sport and Exercise Science



Researching Sport and Exercise Science

Sports science is the study of how the healthy human body works during exercise and how sport and physical activity promote health, physically, mentally and socially.

Sport science is a relatively new academic discipline, but one that is taken extremely seriously and which has received serious funding. Advances in technology and medicine are breaking ground every day.

Sports scientists are a profession in high demand - the job market is very good. As technology evolves and the need for athletes to get any extra edge becomes more acute, your skills will be valued. to maximise sports performance and improve general health and wellbeing through exercise.

Watch this brief video to get a quick understanding of the importance of sport science:

<https://youtu.be/IRGq-N0gdb5>

This knowledge-base
considers a variety
of Exercise Science.



allows you to research and
work in Sport and

Topics Tracker



Topic focus	Completed [tick when complete]	Further comments [ideas, questions, opinions]
Anatomy and physiology		
Fitness testing		
Sport Nutrition		
Sport psychology		
Coaching for Performance		
Sports Injuries		

Anatomy and Physiology

Having an understanding of body systems is imperative in the sports industry so that professionals can help support people who are taking part in sport and exercise. The human body is made up of many different systems that interrelate to allow us to take part in a huge variety of sport and exercise activities. For example, an athlete can go from rest to sprinting in a matter of seconds, whereas an endurance athlete can continue exercising for many hours at a time.

In order to appreciate how each of these systems use in sport and exercise, you will use the internet to find out about the **function and structure** of each of the following:

- the skeletal system
- Muscular system
- Cardiovascular system
- Respiratory system
- energy systems

For each one use the questions on the following pages to form the answers required.

Useful links:

<https://www.youtube.com/watch?v=LReJG7PrXFY>

<https://www.youtube.com/watch?v=E4RjzRzKafk>

https://www.youtube.com/watch?v=_ZwQ7J9v2c

<https://www.youtube.com/watch?v=Et5St6Qt2b0>

https://www.youtube.com/watch?v=RKe8gBvJ_M

<https://www.youtube.com/watch?v=TBDSpOnzFAo>

Anatomy and Physiology reflections

<p>Something I have found interesting</p>	<p>Questions I have about anatomy and physiology</p>
<p>Something that I would like to further investigate</p>	<p>Personal skills I have utilised</p>

Fitness testing

It is essential that sport performers regularly participate in fitness tests to determine their baseline measures. These fitness test results are then used to identify strengths and areas for improvement. You will explore the principles of fitness testing and examine the factors affecting the selection and administration of tests, including validity, reliability and suitability of tests.



Watch the video clip on YouTube:

<https://www.youtube.com/watch?v=Qb-1hMw3spo>

Make notes on what you understand about reliability, validity and practicality of fitness testing.

Fitness testing

Answer the following questions on Fitness testing:

1. What does validity mean in the application to fitness testing.
2. What does reliability means in the application to fitness testing.
3. There are different methods of ensuring reliability, describe each one and give an example:
 - calibration of the equipment
 - warm-up
 - fitness test technique practice
 - skill level of the administrator
 - adherence to test protocol
4. Describe the protocol for each of the following test. How will you ensure it is reliable and valid?
 - Flexibility –shoulder flex test
 - Strength – 1RM tests
 - Aerobic endurance maximal oxygen consumption test (VO₂ max).

Useful websites:

<https://www.brianmac.co.uk/eval.htm>

<https://www.topendsports.com/testing/>

Fitness testing reflections

<p>Something I have found interesting</p>	<p>Questions I have about fitness testing</p>
<p>Areas of fitness testing that I would like to further investigate</p>	<p>Personal skills I have utilised</p>

Sport Nutrition

Sports nutrition plays a key role in optimising the beneficial effects of physical activity, whether you're a bodybuilder, professional athlete in training or exercising to improve your mental and physical health.

Making informed decisions with your nutrition and hydration can result in improved performance, injury prevention and quicker recovery but it's difficult to know where to start with so much conflicting information readily available.

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5. Hydration (requirements of fluid intake).
6. The effects on performance of dehydration and hyperhydration and the signs and symptoms of each.

Useful links:

<https://www.nhs.uk/live-well/eat-well/the-eatwell-guide/>

<https://www.gov.uk/government/publications/the-eatwell-guide>

<https://www.nutrition.org.uk/healthyliving/basics/exploring-nutrients.html>

Sport nutrition reflections

<p>Something I have found interesting</p>	<p>Questions I have about sport nutrition</p>
<p>Areas of Sport nutrition that I would like to further investigate</p>	<p>Personal skills I have utilised</p>

Sport Psychology

At the highest level in sport, success is often down to small margins and performers are always looking for ways to gain an edge over their opponents. You will look at individual psychological factors that can influence performance, the psychological aspects of environments that sports are played in and the influences that others can have on performance.



Watch the video clip on YouTube:

https://www.youtube.com/watch?v=yG7v4y_xwzQ

Make notes on what you understand about Sport psychology and sport performance.

Sport Psychology

Research using the internet, sport psychology and complete the following tasks:

1. There are two types of motivation (intrinsic and extrinsic), describe each type of motivation and give examples how they can be used to improve an athlete's performance.
2. Explain achievement motivation and how coaches can use this to improve the performance of a sports team.
3. Explain the drive theory and how this links with sports performance. Make sure you give two sporting examples.
4. Explain the Inverted U hypothesis and how this links with sports performance. Make sure you give two sporting examples.
5. Explain the Catastrophe theory and how this links with sports performance. Make sure you give two sporting examples.

Useful links:

<https://courses.lumenlearning.com/boundless-psychology/chapter/theories-of-motivation/>

https://www.youtube.com/watch?v=mkllc7U_KZ8

Sport Psychology reflections



<p>Something I have found interesting</p>	<p>Questions I have about Sport psychology</p>
<p>Areas of sport psychology that I would like to further investigate</p>	<p>Personal skills I have utilised</p>

Sports Coaching

Sport participation is increasing in the UK and so there is a demand for sports coaches who can develop the techniques and performance of athletes. National Governing Bodies (NGBs) in sport are pursuing international and major competition success. This requires athletes at all levels of the performance pathway to be guided to correctly develop the techniques that can be built on and refined to produce elite performers. This task will develop your knowledge of the key skills and qualities needed by a sports coach to improve performance.



Sports coaching

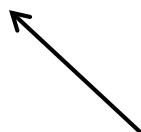
Research the skills and qualities of a sport coaching and complete the mind map below. Put down as many skills as you can. An example has been done for you, to get you started.

Useful link:

<https://www.ukcoaching.org/resources/topics/guides/skills-and-qualities-of-a-coach>

<https://www.brianmac.co.uk/coachsr.htm>

Good Rapport



Skills of a coach

Sports Coaching

Now create a poster to highlight the key skills and qualities needed to be a successful coach. Give as much explanation and examples as possible.

Sports coaching reflections



<p>Something I have found interesting</p>	<p>Questions I have about Sports coaching</p>
<p>Areas of coaching that I would like to further investigate</p>	<p>Personal skills I have utilised</p>

Sports Injuries

For all personnel involved in any aspect of sport and leisure activities, an understanding of sports injuries and their symptoms is essential in order to ensure appropriate treatment is administered in the event of an injury.

Complete the following tasks:

1. What is an acute injury?
2. Give a full description for each of the following injuries:
 - Bone fracture
 - Joint dislocation
 - Ligament sprain/tear
 - Muscles strain/tear
3. What is an overuse injury?
4. Give a full description for each of the following injuries:
 - stress fracture
 - osteoarthritis.
 - Tendinitis
 - Callus.
5. When a first aider treats an injury two main methods are used:
 - P.R.I.C.E.D.
 - S.A.L.T.A.P.S.

What do these acronyms stand for? Explain each procedure.

Useful link:

<https://www.sportsinjuryclinic.net/>

Sports injuries reflections



<p>Something I have found interesting</p>	<p>Questions I have about Sports injuries</p>
<p>Areas of sports injuries that I would like to further investigate</p>	<p>Personal skills I have utilised</p>

What have you learnt?

Mind-map what you have learned about Sport and exercise science [themes, perspectives, key words, research evidence]

Sport Nutrition

Sports injuries



Anatomy and physiology

Final Reflections



<p>Questions I have about Sport and exercise science</p>	<p>Areas that I would like to further investigate</p>
<p>Research that interested me the most</p>	<p>Personal skills I have utilised throughout this project</p>

Submitting research

Congratulations!

You have completed this research project!

You need to submit your project during our first lesson in September or email to Mr Sanderson:

jsanderson@raynespark.merton.sch.uk

