

Component 3 Revision guide

Section A

Here, you will be provided with a case study and asked questions about FACTORS AFFECTING HEALTH AND WELL-BEING relating to the case study.

See below the factors you must familiarise yourself with for SECTION A

Physical and lifestyle factors

1. genetic inheritance, including inherited conditions and predisposition to other conditions
2. ill health (acute and chronic) o diet (balance, quality and amount)
3. amount of exercise
4. substance use, including alcohol, nicotine, illegal drugs and misuse of prescribed drugs

Social, emotional and cultural factors

1. social interactions, e.g. supportive/unsupportive relationships, social integration/isolation
2. stress, e.g. work-related
3. willingness to seek help or access services, e.g. influenced by culture, gender, education.

Economic factors

1. financial resources.

Environmental factors

1. environmental conditions, e.g. levels of pollution, noise
2. housing, e.g. conditions, location.

• The impact of life events relating to relationship changes and changes in life circumstances

You are a healthcare assistant at Bellevue Surgery. You have been asked to assess the health and wellbeing of one of the service users.

Read the information below and then complete the activities that follow.

Location

Damien is 31 years old. He is a patient at Bellevue Surgery. Damien lives in a modern one bedroom apartment in a large town. He does not have a garden, but he has a small balcony and there is a park a short distance from his home.

Medical history

Damien has had breathing difficulties for most of his life. He was diagnosed with asthma when he was three years old. Asthma is a chronic condition that needs regular monitoring. Damien attends the asthma clinic at Bellevue Surgery twice a year.

Family, friends and social interactions

Damien is divorced. He has a daughter, Marie, who is five years old. Damien has a wide circle of friends from school and work. He meets his friends twice a week to play cards and drink a few beers. On Sunday he plays football in the local park if he is well enough.

Day-to-day life

Damien works in an office where he sits at a computer all day. He earns a low income and struggles to pay the rent for his flat. Damien eats a lot of fast food and takeaway meals.

The start of section will look like this. You will be provided with a case study and a series of questions based on this like the ones below

Bellevue Surgery has asked you to review the information about Damien.

- 1 (a) Explain **two** social factors that could have a **positive** effect on Damien's health and wellbeing.

Use the information provided.

(4)

1

.....

.....

2

.....

.....

- (b) Explain **one** environmental factor that could have a **positive** effect on Damien's health and wellbeing.

Use the information provided.

(2)

.....

.....

Social factors – it is important that you **know the classification of each factor** and you look for this in the information provided:

Social interactions

Relationships

Social isolation

USE THE INFORMATION PROVIDED for 1 mark

2nd mark comes from EXPLAINING how you think that has affected the individual

Physical factors: Ill Health

Conditions are separated into CHRONIC or ACUTE conditions. Chronic conditions are described as conditions which are long lasting whereas acute conditions are described as sudden

| Acute | Chronic |
|--------------|---------------|
| Cold | Asthma |
| Pneumonia | Diabetes |
| Broken bones | Osteoporosis |
| Measles | Emphysema |
| Heart attack | Heart disease |

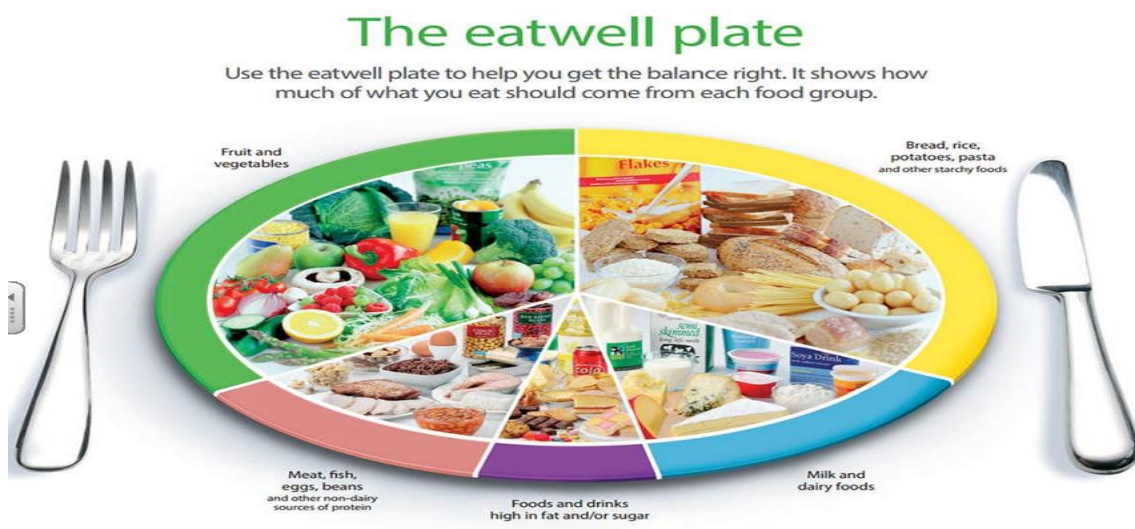
Effects of ill health on different aspects of development:

Poor physical health, reduced mobility, missed time off school and work, worry, anxiety, loss of independence (permanent/temporary), reduction in ability to exercise, social isolation, requiring assistance from family/carers (emphasis on support)

Diet

A balanced diet should contain all of the following nutrients:

Fats, carbohydrates, protein, vitamins, minerals, & fibre



An unbalanced diet can lead to many health complications. An unbalanced diet does not always mean eating too much, it could be that an individual does not get enough of the correct nutrients. This can lead to the following

Eating too much:

Obesity, heart disease, high blood pressure, stroke and tooth decay

Not eating enough of the correct nutrients can lead to:

Eating disorders, anaemia, stunted growth, tiredness, rickets and vitamin deficiencies

Exercise

Benefits of exercising:

Releasing endorphins, feeling good, relieve stress, gain personal satisfaction, prevents isolation, opportunities to socialise, improved physical health, better fitness levels, strength, improved mobility – reduce the risk of: heart disease, osteoporosis, stroke, obesity

Exercise is not always playing sport. **THIS CAN BE DONE THROUGH WALKING, SWIMMING, WALKING THE DOG, WALKING TO WORK, GOING TO THE GYM**

Substance abuse:

Alcohol addiction

- Liver damage
- Addiction
- Increase the risk of cancer
- Poor emotional health as it is a depressant
- Social isolation

Nicotine addiction (smoking)

- Heart disease – increased blood pressure & narrowing of the arteries
- Pneumonia – chemicals damage the lining of the lungs
- Emphysema
- Stroke
- Gum disease
- Breath and clothes smell of smoke
- Hands and nails become stained



Social, cultural and emotional factors

Social:

Interactions are essential for our development as they provide us with:

Confidence, a sense of belonging, improved communication skills

Relationships are essential for promoting effective growth and development across ALL life stages. The **QUALITY** and **STRENGTH** of these relationship influence how we feel about ourselves

Relationships are ALWAYS essential but during the following times can be seen as the most effective:

During infancy/childhood – **bonding/attachment** occurs and enhances the development

During tough time such as **unexpected life events** where SUPPORT is essential to be able to cope

During **later adulthood** when individuals are elderly and need to be cared for due to **loss of independence**

| Supportive relationships can lead to | Unsupportive relationships |
|---|--|
| Physical support and assistance (aiding with loss of independence) | Upset and hurt us |
| Emotional support/reassurance | Lead to isolation |
| A better social life: babysitting, so individuals can socialise | Lead to emotional distress |
| Less financial worries: individuals may support friends financially | Distract from intellectual development: school, university, work opportunities |
| Provide intellectual stimulation: friends will encourage you to learn or take calculated risks in your career | Lead to poor lifestyles choices: drinking, smoking, drugs |

Our relationships dictate whether we feel INTERGRATED (involved with individuals, meeting new people, socialising) OR ISOLATED (on your own, NOT INVOLVED WITH INDIVIDUALS) from a community

Individuals who are **MOST LIKELY TO BE ISOLATED:**

1. Homeless individuals
2. Physically/mentally ill
3. Going through difficult period in their life (maybe an unexpected life event)
4. Individuals who are retired

Stress

Stress can be triggered due to different life events and is very common during adulthood due to paying bills, finding work, caring/providing for a family etc

Stress can also be triggered due to UNEXPECTED LIFE EVENTS such as: bereavement, redundancy, divorce or even relationship problems .

Effects of stress

Physically – lack of sleep, loss of appetite, tension in the body, headaches, high blood pressure

Intellectually – distracted from education/work, loss of concentration

Emotionally – being upset, unhappy, worry, anxiety

Socially – hard to mix with others, lack of time to socialise, isolation

Financial factors

Wealth – the amount of money/material possessions an individual owns

Income – the amount of money an individual earns

Material possessions – objects that are NOT essential to live but can be bought

Poverty – despite benefits being available, they do not receive enough money to afford the meet their basics needs such as: food, clothing & housing

When individuals have an adequate income, generally they can afford better quality housing and access the finer things in life. See below for the impact of adequate income on development

1. Live in a house with a garden
2. Balanced diet
3. Socialise with friends
4. Afford a car/holidays
5. Less stress/money worries
6. Private health care

Environmental factors

Air pollution can:

1. Cause and aggravate respiratory conditions
2. Irritate the eyes, nose and throat
3. Affect individuals with asthma and emphysema, making the conditions worse



Noise pollution can:

1. High blood pressure
2. Sleeplessness
3. Hearing loss
4. Increased stress levels



BOTH OF THE ABOVE CAN BE CAUSED BY LIVING IN URBAN AREAS SUCH AS TOWNS AND CITIES

Housing

Type of home – living in a bigger home (semi-detached/detached) means more personal space, less noise, more time to concentrate on work/school work and LESS STRESS

Condition of home – if the house is **cluttered** this can cause **STRESS** and affect individuals emotionally. If the house is **DAMP**, then this can affect individuals physically and affect their respiratory system and **breathing**

Location of the home – If the home is near a park or any leisure facilities, then this can provide opportunities to walk/exercise

Rural living can lead to:

1. Fresh air and low noise levels
2. Being more relaxed and happy

3. However, rural living means you are far away from essentials such as job opportunities, health care, dental care, social opportunities such as bars, cinema, concerts and can SOMETIMES LEAD TO ISOLATION

Section B

Lifestyle data

Damien attends Bellevue Surgery for his asthma check. Dr Williams, his general practitioner (GP), asks some questions and finds out the following information:

- Damien drinks beer every day
- Damien eats fast food and takeaway meals most days.

Here, you will be initially presented with **LIFESTYLE DATA** for an individual and asked questions regarding the **current** and **future** physical health of your individual based on this. **READ THIS FIRST BEFORE ANSWERING ANY OTHER QUESTIONS**

Below is an example of how the question will be structured

3 Explain what the data provided by Dr Williams suggests about:

- Damien's current physical health
- risks to his future physical health.

Lifestyle data

Damien's current physical health:

Risks to Damien's future physical health:

For this questions you will only be asked about the following:

- Exercise
- Diet
- Smoking
- Alcohol

It is essential that you know the Impact the following have on CURRENT AND FUTURE physical health

SMOKING

| Current physical health | Future physical health |
|--|--|
| Poor peak flow Breathing problems Low fitness levels | Pneumonia Respiratory problems Cardiovascular disease Heart attack Stroke Early death |

Current and future effects of lifestyles on physical health

Alcohol

| Current physical health | Future physical health |
|----------------------------|------------------------------|
| Dehydration Weight gain | Liver disease Early death |

Lack of exercise

| Current physical health | Future physical health |
|---|--|
| Poor peak flow Weight gain Breathing problems Low fitness levels | Obesity Cardiovascular problems Heart attack Stroke |

Poor Diet

| Current physical health | Future physical health |
|---|---|
| Weight gain Tiredness Lack of energy Poor skin | Heart disease Stroke Diabetes Obesity Malnourished Vitamin deficiency Anaemia |

Here, you will be expected to interpret indicators that can be used to measure physiological health, interpreting data using published guidance.

- You will only be asked about **ANY TWO OF THE FOLLOWING** physiological indicators that are used to measure health:

1. pulse (resting and recovery rate after exercise)
2. blood pressure
3. peak flow
4. body mass index (BMI).

- Using published guidance to interpret data relating to these physiological indicators.

- The potential significance of abnormal readings: risks to **CURRENT AND FUTURE** physical health.

Physiological data

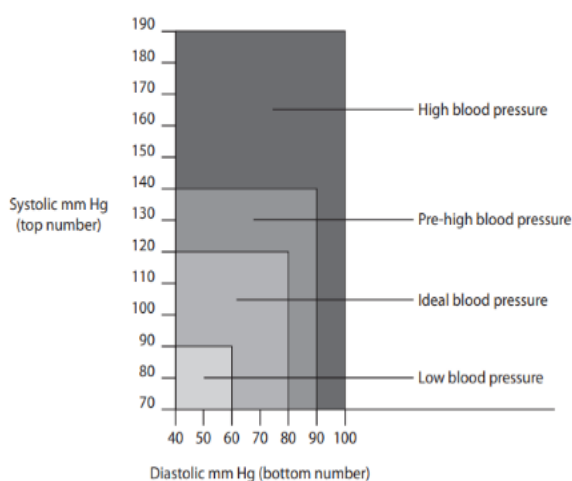
Dr Williams records the following measurements:

| | |
|----------------|-------------------|
| Height | 185 cm |
| Blood pressure | 150/100 mm Hg |
| Peak flow | 480 litres/minute |

Focus ONLY ON THE PHYSIOLOGICAL DATA FIRST BEFORE YOU TRY TO USE THE PUBLISHED GUIDANCE (GRAPHS) (BELOW)

Guidance for physiological data

Dr Williams provides the following guidance to help you interpret the physiological data.



Then using the data, you need to use the GUIDANCE to determine what this shows

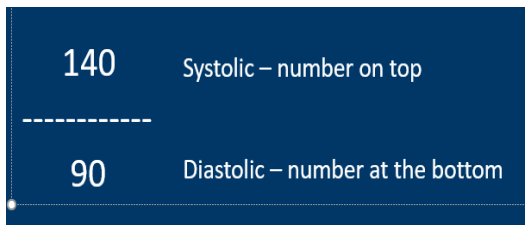
For example Blood pressure 150/100 INDICATES HIGH BLOOD PRESSURE

You must know the effects of abnormal readings on current and future physical health for ALL PHYSIOLOGICAL INDICATORS

Effect on CURRENT physical health

Effect on FUTURE physical health

Blood pressure

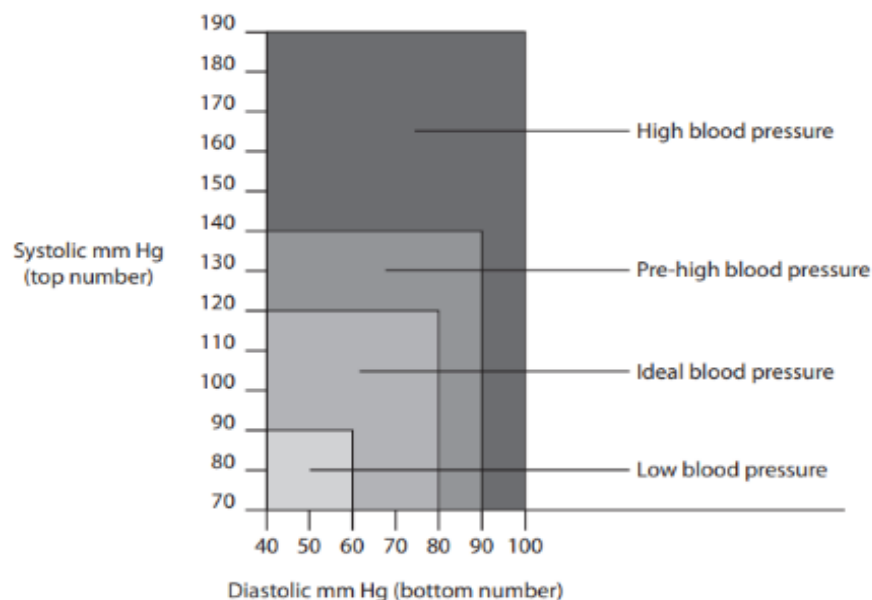


High Blood Pressure = headaches, dizziness, heart disease, heart attacks, early death

- Low blood pressure = Fainting, Falls , Dizziness, Feeling sick

Guidance for physiological data

Dr Williams provides the following guidance to help you interpret the physiological data.



EXAMPLE OF THE GRAPH FREQUENTLY USED

BMI: If BMI is high and an individual is categorised as obese, then this can lead to the following:

| Current physical health | Future physical health |
|--|--|
| <ul style="list-style-type: none"> • Weight gain • Poor fitness levels • Tired quickly • Mobility problems | <ul style="list-style-type: none"> • Obesity • Diabetes • Cardiovascular disease (heart attack) • stroke |

IT CAN ALSO LEAD TO SLEEP APNEA, TOO MUCH FAT IN THE NECK RESTRICTS THE OXYGEN TO THE BRAIN AND DISRUPTS SLEEP

However, if BMI is low and an individual is categorised as underweight then this can lead to the following:

| Current physical health | Future physical health |
|---|--|
| <ul style="list-style-type: none"> • Tiredness • Stunted growth • Vitamin deficiencies • Lack of energy | <ul style="list-style-type: none"> • Anaemia • Heart failure • Other nutrient deficiencies • Rickets |

Example of the data most frequently used for this and how to work it out

Physiological data

Dr Brown records the following measurements:

| | |
|-----------------------|----------------------|
| Body Mass Index (BMI) | 31 Kg/m ² |
| Height | 155 cm |
| Peak flow | 300 litres/minute |

Guidance for physiological data

Dr Brown gives you the guidance below to help you interpret the physiological data.

BMI

| Weight Categories | BMI (Kg/m ²) |
|-------------------|--------------------------|
| Underweight | <18.5 |
| Healthy weight | 18.5 – 24.9 |
| Overweight | 25 – 29.9 |
| Obese | 30 – 34.9 |
| Severely obese | 35 – 39.9 |
| Morbidly obese | >40 |

This clearly shows that the individual is **OBESE**

Peak flow

| Current physical health | Future physical health |
|--|---|
| <ul style="list-style-type: none"> Breathing problems Poor fitness levels Mobility problems Unable to exercise | <ul style="list-style-type: none"> Respiratory diseases Weight gain/obesity due to limited exercise |

Example of the data most frequently used for this and how to work it out

| PEF in l/min | | | | | | | | | | | | | | Body height in metres | | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Men | 1.40 | 1.45 | 1.50 | 1.55 | 1.60 | 1.65 | 1.70 | 1.75 | 1.80 | 1.85 | 1.90 | 1.95 | 2.00 | | | | | | | | | | | | | | |
| 15 | 455 | 476 | 496 | 519 | 536 | 556 | 576 | 596 | 616 | 636 | 656 | 676 | 696 | | | | | | | | | | | | | | |
| 20 | 452 | 472 | 492 | 512 | 532 | 553 | 573 | 593 | 613 | 633 | 653 | 673 | 693 | | | | | | | | | | | | | | |
| 25 | 449 | 469 | 489 | 509 | 529 | 549 | 569 | 589 | 609 | 629 | 650 | 670 | 690 | | | | | | | | | | | | | | |
| 30 | 446 | 466 | 486 | 506 | 526 | 546 | 566 | 586 | 606 | 626 | 646 | 666 | 686 | | | | | | | | | | | | | | |
| 35 | 442 | 462 | 482 | 502 | 523 | 543 | 563 | 583 | 603 | 623 | 643 | 663 | 683 | | | | | | | | | | | | | | |
| 40 | 439 | 459 | 479 | 499 | 519 | 539 | 559 | 579 | 600 | 620 | 640 | 660 | 680 | | | | | | | | | | | | | | |
| 45 | 436 | 456 | 476 | 496 | 516 | 536 | 556 | 576 | 596 | 616 | 636 | 656 | 677 | | | | | | | | | | | | | | |
| 50 | 432 | 452 | 473 | 493 | 513 | 533 | 553 | 573 | 593 | 613 | 633 | 653 | 673 | | | | | | | | | | | | | | |
| 55 | 429 | 449 | 469 | 489 | 509 | 529 | 549 | 570 | 590 | 610 | 630 | 650 | 670 | | | | | | | | | | | | | | |
| 60 | 426 | 446 | 466 | 486 | 506 | 526 | 546 | 566 | 586 | 606 | 626 | 647 | 667 | | | | | | | | | | | | | | |
| 65 | 422 | 443 | 463 | 483 | 503 | 523 | 543 | 563 | 583 | 603 | 623 | 643 | 663 | | | | | | | | | | | | | | |
| 70 | 419 | 439 | 459 | 479 | 499 | 520 | 540 | 560 | 580 | 600 | 620 | 640 | 660 | | | | | | | | | | | | | | |
| 75 | 416 | 436 | 456 | 476 | 496 | 516 | 536 | 556 | 576 | 596 | 617 | 637 | 657 | | | | | | | | | | | | | | |
| 80 | 413 | 433 | 453 | 473 | 493 | 513 | 533 | 553 | 573 | 593 | 613 | 633 | 653 | | | | | | | | | | | | | | |

(Source: Data from: Tomlinson GJ, Gutter PM. Physiology of Breathing. Thomas 1999)

1st step – use the data on the previous page to find the AGE and HEIGHT OF THE PERSON

Use this on the table to see what a HEALTHY PEAK FLOW SCORE FOR THAT INDIVIDUAL SHOULD BE.

For example, in an individual is 45 years old and is 1.65m tall THEIR PEAK flow score should be 536 l/min (see the arrows on the table)

Physiological data

Dr Williams records the following measurements:

| | |
|----------------|-------------------|
| Height | 185 cm |
| Blood pressure | 150/100 mm Hg |
| Peak flow | 480 litres/minute |

Now, go back to the original data at start of section B to See what your individuals PEAK flow score is. Is this higher is lower than it should be? **IT SHOULD USUALLY BE LOWER**

Needs, Wants and Circumstances

HOW TO STRUCTURE YOUR ANSWER FOR THIS QUESTION

WHEN YOU GET YOUR PAPER WRITE THE STRUCTURE DOWN THE SIDE ON THIS QUESTION - A, EV, EX, P

- 1) Action – **what is the action you have set?**
- 2) Evidence – **WHY** have you decided to improve this area of health?
What does the information in the scenario say?
- 3) Explain – **HOW** will this action improve their health?
- 4) Person centred approach – **how** have you considered wants and wishes of the individual?

Obstacles

- **Emotional/psychological obstacles** lack of motivation, low self-esteem, acceptance of current state
- **Time constraints** - work and family commitments
- **Availability of resources** - financial, physical, e.g. equipment
- **Unachievable targets** - unachievable for the individual or unrealistic timescale
- **Lack of support** - from family and friends
- **Ability/disability**

How to answer:

1. What is the obstacle
2. Why is it an obstacle for that person?
3. How can this obstacle be minimised or overcome?

