



Rewarding Learning

**ADVANCED SUBSIDIARY (AS)
General Certificate of Education
January 2013**

**Home Economics
Assessment Unit AS 2**

assessing

Priority Health Issues

[AN121]

TUESDAY 22 JANUARY, MORNING

**MARK
SCHEME**

Section A

AVAILABLE
MARKS

- 1 (a) Discuss the factors that could contribute to an individual having a positive energy balance. (AO1, AO2, AO3)

Mark Band ([0]–[3])

Overall impression: basic

- inadequate knowledge and understanding of the factors that could contribute to a positive energy balance
- demonstrates a limited ability to apply this knowledge and understanding to the question
- demonstrates a limited ability to discuss the relevant factors
- quality of written communication is basic

Mark Band ([4]–[7])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of the factors that could contribute to a positive energy balance
- demonstrates a reasonable to good ability to apply this knowledge and understanding to the question
- demonstrates a reasonable to good ability to discuss the relevant factors
- quality of written communication is reasonable to good

Mark Band ([8]–[10])

Overall impression: very good to highly competent

- clear knowledge and understanding of the factors that could contribute to a positive energy balance
- demonstrates a very good to highly competent ability to apply this knowledge and understanding to the question
- demonstrates a very good to highly competent ability to discuss the relevant factors
- quality of written communication is very good to highly competent

Some examples of suitable points to be discussed by the candidate:

- dietary factors; an unhealthy diet or poor eating habits, e.g. energy dense snacks and fast foods, skipping breakfast, bigger portion sizes and high calorie drinks can contribute to a positive energy balance
- genetic factors; heredity can be linked to obesity as children from obese parents are more likely to be overweight or obese
- socio economic factors; cost of healthy food and gyms may contribute to obesity
- environment factors; sedentary lifestyle, increased technology, mechanisation, and a lack of physical activity can be contributory factors to a positive energy balance
- psychological factors; stress, depression and comfort eating can be a factor to over eating and may lead to excessive weight gain
- age; metabolism slows down as individuals get older and so older people may be more likely to be overweight

All other valid points will be given credit

[10]

- (b) Outline the possible health risks associated with overweight and obesity. (AO1, AO2, AO3)

Mark Band ([0]–[3])

Overall impression: basic

- inadequate knowledge and understanding of the possible health risks associated with overweight and obesity
- demonstrates a limited ability to apply this knowledge and understanding to the question
- demonstrates a limited ability to outline these health risks
- quality of written communication is basic

Mark Band ([4]–[7])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of the possible health risks associated with overweight and obesity
- demonstrates a reasonable to good ability to apply this knowledge and understanding to the question
- demonstrates a reasonable to good ability to outline these health risks
- quality of written communication is reasonable to good

Mark Band ([8]–[10])

Overall impression: very good to highly competent

- clear knowledge and understanding of the possible health risks associated with overweight and obesity
- demonstrates a very good to highly competent ability to apply this knowledge and understanding to the question
- demonstrates a very good to highly competent ability to outline these health risks
- quality of written communication is very good to highly competent

Some examples of suitable points to be outlined by the candidate:

- Type 2 diabetes; this may develop as a result of being overweight as the body becomes insulin resistant
- cancers; there is a higher risk of developing cancer with overweight and obesity
- CVD; individuals who are overweight are more likely to develop hypertension and high cholesterol which increases the risk of CVD
- respiratory problems; excess weight adds pressure to the lungs and can cause difficulties in breathing, walking and exercise
- mental health problems; being overweight can affect body image and self-esteem which can lead to or increase stress and other emotional problems

All other valid points will be given credit

[10]

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- 2 (a) Outline some of the contributory factors that increase the risk of an adolescent developing a mental and emotional health problem. (AO1, AO2, AO3)

Mark Band ([0]–[3])

Overall impression: basic

- inadequate knowledge and understanding of mental and emotional health problems
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited ability to outline some of the contributory risk factors facing adolescents
- quality of written communication is basic

Mark Band ([4]–[7])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of mental and emotional health problems
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to outline some of the contributory risk factors facing adolescents
- quality of written communication is reasonable to good

Mark Band ([8]–[10])

Overall impression: very good to highly competent

- clear knowledge and understanding of mental and emotional health problems
- demonstrates a very good to highly competent ability to apply knowledge and understanding to the question
- demonstrates a very good to highly competent ability to outline some of the contributory risk factors facing adolescents
- quality of written communication is very good to highly competent

Some examples of suitable points to be described by the candidate:

- personal factors; self-esteem, personality, appearance and how the adolescent feels about themselves can affect confidence and coping skills
- family risk factors; family relationships can have a big impact on mental health especially if there is family conflict or a change in family circumstances
- school; bullying, loneliness, exams and peer pressure can add stress and lead to anxiety and poor emotional health
- finance; a lack of money, unemployment or gambling can lead to financial pressures and frustration which causes stress and anxiety
- alcohol/drug abuse; adolescents can become anxious or depressed as a result of alcohol/drug misuse which can often make problems seem worse

All other valid points will be given credit

[10]

(b) Discuss two types of support available to help an adolescent with a mental or emotional health problem. (AO1, AO2, AO3)

Mark Band ([0]–[3])

Overall impression: basic

- inadequate knowledge and understanding of the support available for a mental or emotional health problem
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited ability to discuss the support available to help an adolescent
- quality of written communication is basic

Mark Band ([4]–[7])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of the support available for a mental or emotional health problem
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to discuss the support available to help an adolescent
- quality of written communication is reasonable to good

Mark Band ([8]–[10])

Overall impression: very good to highly competent

- clear knowledge and understanding of the support available for a mental or emotional health problem
- demonstrates a very good to highly competent ability to apply knowledge and understanding to the question
- demonstrates a very good to highly competent ability to discuss the support available to help an adolescent
- quality of written communication is very good to highly competent

Some examples of suitable points to be explained by the candidate:

- talking to others; this provides support by allowing the adolescent to talk about problems, talking to others can reduce stress and anxiety and provide support in difficult situations
- self help strategies; listening to music, relaxation, art, drama and exercise can provide support in the short term, it can help by acting as a distraction technique and helps to reduce stress and aid relaxation

All other valid points will be given credit [10]

Section A

	20
Section A	20

Section B

AVAILABLE
MARKS

- 3 Assess the role of food choice in relation to the development of specific cancers. (AO1, AO2, AO3)

Mark Band ([0]–[5])

Overall impression: basic

- inadequate knowledge and understanding of food choice in relation to the development of specific cancers
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited ability to assess the role of food choice in relation to the development of specific cancers
- quality of written communication is basic

Mark Band ([6]–[10])

Overall impression: adequate to minimally competent

- adequate to minimally competent knowledge and understanding of food choice in relation to the development of specific cancers
- demonstrates adequate to minimally competent ability to apply knowledge and understanding to the question
- demonstrates adequate to minimally competent ability to assess the role of food choice in relation to the development of specific cancers
- quality of written communication is adequate to minimally competent

Mark Band ([11]–[15])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of food choice in relation to the development of specific cancers
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to assess the role of food choice in relation to the development of specific cancers
- quality of written communication is reasonable to good

Mark Band ([16]–[20])

Overall impression: very good to highly competent

- clear knowledge and understanding of food choice in relation to the development of specific cancers
- demonstrates a very good to highly competent ability to apply knowledge and understanding to the question
- demonstrates a very good to highly competent ability to assess the role of food choice in relation to the development of specific cancers
- quality of written communication is very good to highly competent

Some examples of suitable points to be assessed by the candidate:

- fat intake and tumours; eating a low fat diet may be beneficial because a high fat diet has been associated with increased tumours; for example, a high fat diet may increase the secretion of bile acids which can form mutagenic compounds leading to an increased risk of breast, colon and prostate cancers
- fat intake and weight gain; obesity increases the risk of oesophagus and breast cancers, abdominal fatness causes higher than normal levels of hormones and growth factors that promote growth of cancer cells, obesity is strongly associated with an increased risk of breast cancer in women so a low fat diet could help reduce the development of these specific cancers
- red meat intake; high intakes of nitrogenous residues from meat digestion may be metabolised in the large bowel to produce ammonia which is linked with bowel cancer; reducing red meat intake may then be beneficial for those at risk of this type of cancer
- processed meat consumption; these are high in nitrites which increase N-nitroso compounds which are carcinogenic; cured meat promotes the risk of colorectal cancer and may increase the risk of cancers to the breast, lung, prostate and pancreas
- overcooked foods; charring of meat by barbecuing and frying can cause polycyclic aromatic hydrocarbons (PAHs) to form which are carcinogenic
- sodium/salt intake; high intakes of salt and salt preserved foods may contribute to stomach cancer
- fruit and vegetable consumption; there is sufficient evidence that these have a protective role against cancer, to consider following the advice to consume at least five portions of fruit and vegetables each day; they provide protective antioxidants to combat free radicals which can protect against many cancers, especially the stomach and bowel
- alcohol consumption; there is evidence to show that binge drinking may promote tumours in the respiratory tract, mouth, throat and liver
- non starch polysaccharide intake; high fibre intakes provide some protection against cancer of colon and rectum; NSP increases bulk which increases transit time through the colon and dilutes harmful carcinogenic substances

All other valid points will be given credit

[20]

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- 4 “The promotion of good sexual health is not just a matter for health professionals.”

Source: The Sexual Health Promotion Strategy 2008–2010

Consider how individuals can ensure they have good sexual health.
(AO1, AO2, AO3)

Mark Band ([0]–[5])

Overall impression: basic

- inadequate knowledge and understanding of good sexual health
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited ability to consider how individuals can ensure good sexual health
- quality of written communication is basic

Mark Band ([6]–[10])

Overall impression: adequate to minimally competent

- adequate to minimally competent knowledge and understanding of good sexual health
- demonstrates adequate to minimally competent ability to apply knowledge and understanding to the question
- demonstrates adequate to minimally competent ability to consider how individuals can ensure good sexual health
- quality of written communication is adequate to minimally competent

Mark Band ([11]–[15])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of good sexual health
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to consider how individuals can ensure good sexual health
- quality of written communication is reasonable to good

Mark Band ([16]–[20])

Overall impression: very good to highly competent

- clear knowledge and understanding of good sexual health
- demonstrates a very good to highly competent ability to apply knowledge and understanding to the question
- demonstrates a very good to highly competent ability to consider how individuals can ensure good sexual health
- quality of written communication is very good to highly competent

Some examples of suitable points to be discussed by the candidate:

- education; individuals need to have knowledge and understanding of sexual health including pregnancy and STIs
- personal responsibility; developing life skills and confidence to manage relationships and to promote responsible decision making
- contraception; individuals need to seek advice on contraception including seeking emergency contraception and recognising that some contraceptives prevent pregnancy but do not prevent STIs
- services; individuals should use all services available, e.g. GP, FPA and GUM clinics and avail of screening programmes and HPV immunisations
- responsible drinking; binge drinking may lead to individuals taking risks and may lead to unplanned and/or unprotected sex

All other valid points will be given credit

[20]

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- 5 Explain the role of sugars, starches and non starch polysaccharides (NSP) in the management of Type 2 diabetes. (AO1, AO2, AO3)

Mark Band ([0]–[5])

Overall impression: basic

- inadequate knowledge and understanding of the role of sugars, starches and NSP in the management of Type 2 diabetes
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited ability to explain this role
- quality of written communication is basic

Mark Band ([6]–[10])

Overall impression: adequate to minimally competent

- adequate to minimally competent knowledge and understanding of the role of sugars, starches and NSP in the management of Type 2 diabetes
- demonstrates adequate to minimally competent ability to apply knowledge and understanding to the question
- demonstrates adequate to minimally competent ability to explain this role
- quality of written communication is adequate to minimally competent

Mark Band ([11]–[15])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of the role of sugars, starches and NSP in the management of Type 2 diabetes
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to explain this role
- quality of written communication is reasonable to good

Mark Band ([16]–[20])

Overall impression: very good to highly competent

- clear knowledge and understanding of the role of sugars, starches and NSP in the management of Type 2 diabetes
- demonstrates a very good to highly competent ability to apply knowledge and understanding to the question
- demonstrates a very good to highly competent ability to explain this role
- quality of written communication is very good to highly competent

Some examples of suitable points to be discussed by the candidate:

- sugars; only a small amount of sugars and foods containing sugar should be eaten as NMES are rapidly digested and absorbed resulting in a rapid increase in blood glucose and high levels of insulin, they should be part of a meal rather than snacks
 - starch; individuals with Type 2 diabetes should follow the same dietary advice for the general population which recommends an increase in consumption of starchy carbohydrate; slow acting starches will also reduce fluctuations in blood glucose levels
 - complex carbohydrate; the diet should contain high amounts of complex carbohydrate and NSP because these usually have a low glycemic index and are absorbed slowly preventing rapid rises in blood glucose levels
 - NSP; a diet high in NSP especially soluble NSP improves glucose tolerance and will help to control the metabolism of sugar in the blood
- All other valid points will be given credit [20]

Section B

Total

20

40

60