

ADVANCED SUBSIDIARY (AS) General Certificate of Education 2011

# **Home Economics**

Assessment Unit AS 2

assessing

**Priority Health Issues** 

[AN121]

**MONDAY 6 JUNE, AFTERNOON** 

# MARK SCHEME

**1** (a) Outline the relevant dietary targets from the Food and Nutrition Strategy for reducing cardiovascular disease in Northern Ireland (AO1, AO2, AO3)

# Mark Band ([0]-[3])

Overall impression: basic

- inadequate knowledge and understanding of the Food and Nutrition Strategy
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited ability to select relevant targets from the strategy
- demonstrates a limited ability to outline the relevant targets for cardiovascular disease
- quality of written communication is basic

# Mark Band ([4]-[7])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of the Food and Nutrition Strategy
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to select relevant targets from the strategy
- demonstrates a reasonable to good ability to outline the relevant targets for cardiovascular disease
- 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 Food and Nutrition Strategy
- 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 select relevant targets from the strategy
- demonstrates a very good to highly competent ability to outline the relevant targets for cardiovascular disease
- quality of written communication is very good to highly competent

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

- total fats; the contribution of total fat to dietary energy should be reduced to 35% as the effect of dietary fats on blood cholesterol influences the risk of cardiovascular disease
- saturated fatty acids; contribution of saturated fatty acids to dietary energy should be reduced to 10% or less as it increases total cholesterol and increases LDL cholesterol
- n-3 polyunsaturated fatty acids; the contribution of mainly fish oils should be increased to 0.2g per day or 1.5g per week as this lowers LDL cholesterol which is a contributing factor for cardiovascular disease
- fibre/NSP; the average consumption of NSP should be increased to 18g per day as this lowers the risk of cardiovascular disease

#### Section A

- sodium; intake of sodium from salt should be reduced to 6g per day as this ٠ affects blood pressure/hypertension a risk factor for cardiovascular disease
- fruit and vegetables; contain antioxidants which play a preventative role in the formation of plaques
- oily fish; contain omega 3 fatty acids which lower LDL blood cholesterol

All other valid points will be given credit.

[10]

AVAILABLE MARKS

(b) Discuss lifestyle advice for the prevention of cardiovascular disease. (AO1, AO2, AO3)

# Mark Band ([0]-[3])

Overall impression: basic

- inadequate knowledge and understanding of preventing cardiovascular disease
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited ability to discuss how lifestyle may prevent cardiovascular disease
- quality of written communication is basic

## Mark Band ([4]-[7])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of preventing cardiovascular disease
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to discuss how lifestyle may prevent cardiovascular disease
- quality of written communication is reasonable to good

## Mark Band ([8]-[10])

Overall impression: very good to highly competent

- clear knowledge and understanding of preventing cardiovascular disease
- 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 how lifestyle may prevent cardiovascular disease
- guality of written communication is very good to highly competent

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

- regular physical activity; exercise reduces the risk of cardiovascular disease (CVD), 30 minutes each day of exercise or simple modifications to daily life e.g. taking the stairs instead of a lift helps ease the burden on the heart by strengthening the muscles
- reduce alcohol consumption; alcohol adds calories to the diet which may cause weight gain increasing the risk of CVD, moderate drinkers may have lower risk of CVD as the antioxidants in red wine may lower LDL cholesterol

Section A	AVAILABLE MARKS
<ul> <li>stop smoking; smoking reduces the oxygen carrying capacity of the blood and contributes to fatty streaks which narrows blood vessels and increases the risk of CVD</li> <li>reduce/avoid stress; anxiety or prolonged periods of stress may increase blood pressure</li> </ul>	
<ul> <li>weight management; individuals may need to make lifestyle changes to ensure added burden is not placed on the heart, an optimum weight should be maintained</li> </ul>	
All other valid points will be given credit. [10]	20

2 (a) Outline the aims of the Promoting Mental Health Strategy (2003-2008). (AO1, AO2, AO3)

# Mark Band ([0]-[3])

Overall impression: basic

- inadequate knowledge and understanding of the Promoting Mental Health Strategy (2003-2008)
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited ability to outline the aims of the strategy
- quality of written communication is basic

# Mark Band ([4]-[7])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of the Promoting Mental Health Strategy (2003-2008)
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to outline the aims of the strategy
- 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 Promoting Mental Health Strategy (2003-2008)
- 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 the aims of the strategy
- quality of written communication is very good to highly competent

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

- improve people's mental and emotional wellbeing; this focuses on people at risk or vulnerable people with identified problems, their carers and families
- prevent or reduce the incidence of mental health issues; the aim is to reduce or prevent the impact of mental and emotional distress, anxiety, suicide and mental illness on society
- raise awareness; the aim is to raise awareness at public, professional and policy making levels and reduce discrimination against people with mental health problems
- training; ensure individuals are skilled, knowledgeable and aware of effective practice

All other valid points will be given credit.

[10]

AVAILABLE MARKS

(b) Explain why we need a mental health strategy in Northern Ireland. (AO1, AO2, AO3)

# Mark Band ([0]-[3])

Overall impression: basic

- inadequate knowledge and understanding of the mental health strategy
- demonstrates a limited ability to apply knowledge and understanding to the question
- · demonstrates a limited ability to address the mental health strategy
- demonstrates a limited ability to explain the need for this strategy
- quality of written communication is basic

#### Mark Band ([4]-[7])

Overall impression: reasonable to good

- reasonable to good knowledge and understanding of mental health strategy
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to address the mental health strategy
- demonstrates a reasonable to good ability to explain the need for this strategy
- 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 health strategy
- 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 address the mental health strategy
- demonstrates a very good to highly competent ability to explain the need for this strategy
- quality of written communication is very good to highly competent

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

- priority for action; the Northern Ireland (NI) Executive identified mental and emotional health and suicide as a priority area in the Investing for Health Strategy in an attempt to ensure healthier people
- economic costs on the health service; mental health problems are among the most common forms of ill health, approximately 1 in 6 people suffer from a diagnosed condition, between 10-20% of teenagers will suffer from depression
- mental health problems in NI; research shows that people in NI are at greater risk of mental ill health than people in England and Scotland, poverty and community conflict have affected individuals
- to promote good mental health; prevention of ill health and early intervention when mental health issues occur

#### Section A

reduce inequalities and stigma or barriers; promoting mental health is • about strengthening individuals or increasing resilience, strengthening communities and reducing structural barriers to mental health through education, housing and support services

All other valid points will be given credit.

[10]

Section A

20 20

AVAILABLE MARKS

AVAILABLE MARKS

**3** Consider the contribution each of the following factors make to weight gain. (AO1, AO2, AO3)

# Mark Band ([0]-[5])

Overall impression: basic

- inadequate knowledge and understanding of the prevalence of overweight and obesity
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited knowledge and understanding of each factor
- demonstrates a limited ability to consider the contribution each factor may make to weight gain
- quality of written communication is basic

## Mark Band ([6]-[10])

Overall impression: adequate to minimally competent

- adequate to minimally competent knowledge and understanding of prevalence of overweight and obesity
- demonstrates adequate to minimally competent ability to apply knowledge and understanding to the question
- demonstrates adequate to minimally competent knowledge and understanding of each factor
- demonstrates adequate to minimally competent ability to consider the contribution each factor may make to weight gain
- 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 prevalence of overweight and obesity
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good knowledge and understanding of each factor
- demonstrates a reasonable to good ability to consider the contribution each factor may make to weight gain
- quality of written communication is reasonable to good

## Mark Band ([16]-[20])

Overall impression: very good to highly competent

- clear knowledge and understanding of prevalence of overweight and obesity
- demonstrates a very good to highly competent ability to apply knowledge and understanding to the question
- demonstrates a very good to highly competent knowledge and understanding
   of each factor
- demonstrates a very good to highly competent ability to consider the contribution each factor may make to weight gain
- quality of written communication is very good to highly competent

#### Some examples of suitable points to be considered by the candidate:

#### High dietary fat intake

- energy input exceeding energy output; energy dense foods/leads to positive energy balance
- snacking; greater dependence on prepared and fast foods which are highly paletable and easy to overeat
- choosing energy dense foods; a high consumption of convenience foods and fast food products
- portion sizes; individuals may be eating larger portions contributing to positive energy balance

#### Low levels of physical activity

- low levels of physical activity means that excess energy is not used up and obesity is likely since fat is stored in adipose tissue
- a sedentary lifestyle; due to technological advances and changes to occupational activity
- age; physical activity tends to decline with age thus contributing to weight gain

#### Psychological factors

- emotional disturbances; some individuals comfort eat for psychological reasons causing positive energy balance
- binge eating; individuals with psychological factors have tendency to binge on high calorie foods e.g. high fat and sugar snacks
- emotional distress and low self esteem; these have been linked to weight gain through a consumption of higher fat comfort foods

#### Genetic predisposition

- relationship between parent and children; there is evidence to suggest that there is an inherited gene that causes children of overweight parents to be in positive energy balance
- limited contribution; research indicates that obesity is not necessarily the result of a simple genetic defect but determined by an interplay between a wide range of other factors e.g., home environment

All other valid points will be given credit.

[20]

20

4 The Sexual Health Promotion Strategy (2008-2013) has identified 'Prevention' and 'Services' as two of the action areas to improve protect and promote the sexual health of the population in Northern Ireland.

Describe how these two action areas are being implemented in Northern Ireland. (AO1, AO2, AO3)

## Mark Band ([0]-[5])

Overall impression: basic

- inadequate knowledge and understanding of the Sexual Health Promotion Strategy
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited ability to select action areas for 'Prevention' and 'Services'
- demonstrates a limited ability to examine how 'Prevention' and 'Services' are implemented in Northern Ireland (NI)
- quality of written communication is basic

## Mark Band ([6]-[10])

Overall impression: adequate to minimally competent

- adequate to minimally competent knowledge and understanding of Sexual Health Promotion Strategy
- demonstrates adequate to minimally competent ability to apply knowledge and understanding to the question
- demonstrates adequate to minimally competent ability to select action areas for 'Prevention' and 'Services'
- demonstrates adequate to minimally competent ability to examine how 'Prevention' and 'Services' are implemented in NI
- 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 Sexual Health Promotion Strategy
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to select action areas for 'Prevention' and 'Services'
- demonstrates a reasonable to good ability to examine how 'Prevention' and 'Services' are implemented in NI
- quality of written communication is reasonable to good

## Mark Band ([16]-[20])

Overall impression: very good to highly competent

- clear knowledge and understanding of Sexual Health Promotion Strategy
- 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 select action areas for 'Prevention' and 'Services'
- demonstrates a very good to highly competent ability to examine how 'Prevention and Services' are implemented in NI
- quality of written communication is very good to highly competent

#### Some examples of suitable points to be examined by the candidate:

#### Prevention

- Public information campaign; this aims to promote sexual health and raise awareness of specific sexual health issues and to tackle the stigma attached to HIV, STIs and sexual orientation, it is important that positive and accurate information about sexual health issues is promoted
- community based programmes; developed to promote sexual health including the prevention of STIs and HIV/AIDS, these programmes have been planned to take account of individuals with disability or from an ethnic origin
- health promoting workplaces; this initiative promotes and supports a more consistent approach and enables individuals to develop skills and acquire knowledge to make informed choices about their sexual health
- Relationships and Sexuality Education; schools have an important contribution to make in influencing and developing young people's sexual health and enabling them to make responsible decisions about sexual health issues
- implement NICE Guidelines; NICE published health guidance to help reduce the transmission of STIs /HIV and reduce the rate of under 18 conceptions
- HPV immunisation programme; the HPV vaccine offers the potential to prevent up to 70% of cervical cancers, the vaccination programme is offered to 12-13 year olds with a catch up programme for girls up to the age of 18

#### Services

- to provide information on local services; a range of sexual health services are available eg family planning, cervical screening and GUM clinics, it is essential that these services are accessible to all and individuals are ensured confidentiality
- to improve access to Genito Urinary Medicine and Sexual Health Services in Northern Ireland
- to commence a chlamydia testing programme
- to develop a pilot scheme to expand sexual health services for students
- to develop and deliver innovative services for commercial sex workers which will promote and facilitate their increased access to sexual health information and services

All other valid points will be given credit.

[20]

20

AVAILABLE MARKS

**5** Explain the role of carbohydrates and NSP in the management of diabetes (AO1, AO2, AO3)

# Mark Band ([0]-[5])

Overall impression: basic

- inadequate knowledge and understanding of the management of diabetes
- demonstrates a limited ability to apply knowledge and understanding to the question
- demonstrates a limited ability to explain the role of carbohydrates and NSP in the management of diabetes
- quality of written communication is basic

# Mark Band ([6]-[10])

Overall impression: adequate to minimally competent

- adequate to minimally competent knowledge and understanding of management of diabetes
- demonstrates adequate to minimally competent ability to apply knowledge and understanding to the question
- demonstrates adequate to minimally competent ability to explain the role of carbohydrates and NSP in the management of diabetes
- 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 management of diabetes
- demonstrates a reasonable to good ability to apply knowledge and understanding to the question
- demonstrates a reasonable to good ability to explain the role of carbohydrates and NSP in the management of diabetes
- quality of written communication is reasonable to good

# Mark Band ([16]-[20])

Overall impression: very good to highly competent

- clear knowledge and understanding of management of 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 the role of carbohydrates and NSP in the management of diabetes
- quality of written communication is very good to highly competent

#### Section B

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

Sugars; non-milk extrinsic sugars, because of their rapid rate of digestion and absorption, can result in a rapid increase in blood glucose and high levels of insulin, restriction of sugar intake may form part of the management of diabetes; non-insulin-dependent diabetes is linked with overweight, excessive intake of any source of energy, including sugar, may increase the risk of its development

Complex carbohydrates; during passage through the digestive tract the products of starch digestion are released more slowly than sugars, consequently, the effects on blood sugar levels are small

Non-starch polysaccharides (NSP); the presence of soluble NSP increases viscosity, the viscous contents move slowly along the duodenum and release nutrients, including glucose, over a longer time and a greater length of the gut; this means that the rise in blood levels of nutrients, including glucose, is prolonged and attains lower peaks, this results in better control of blood sugar levels; the presence of NSP in the stomach can contribute to a feeling of satiety, and possibly helps in weight maintenance which may help control diabetes; regular consumption of NSP in the diet may lower the risk of developing non-insulin-dependent diabetes

Glycemic Index; choosing carbohydrate foods with a low glycemic index, such as beans and apples, have been shown to improve blood glucose control in those with diabetes;

All other valid points will be given credit.

[20]

Section B

Total

60

20

40

AVAILABLE MARKS