

GCSE FOOD PREPARATION AND NUTRITION 8585/W

Paper 1 Food Preparation and Nutrition

Mark scheme

June 2021

Version: 1.0 Final



Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly Level 3 with a small amount of Level 4 material it would be placed in Level 3 but be awarded a mark near the top of the level because of the Level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the guestion must be awarded no marks.

| Section A | | | | |
|-----------|----------------------------|-------------------------|----------------|--|
| Question | Answer Key | Assessment Objective | Total marks | |
| 01.1 | D – Tofu | AO1 | 1 | |
| 01.2 | B – maintain water balance | AO1 | 1 | |
| 01.3 | B – night blindness | AO1 | 1 | |
| 01.4 | D – Staphylococcus aureus | AO1 | 1 | |
| 01.5 | A – Canned | AO1 | 1 | |
| 01.6 | A – carbon footprint | AO1 | 1 | |
| 01.7 | C-2°C | AO1 | 1 | |
| 01.8 | B - Vitamin C | AO1 | 1 | |
| 01.9 | D – 100 ° C | AO1 | 1 | |
| 01.10 | C – lemon juice | AO1 | 1 | |
| 01.11 | C – Iron | AO1 | 1 | |
| 01.12 | C – Milk | AO1 | 1 | |
| 01.13 | D – Vitamins D and E | AO1 | 1 | |
| 01.14 | D – Starch | AO1 | 1 | |
| 01.15 | A – dextrinisation | AO1 | 1 | |
| 01.16 | D – shortening | AO1 | 1 | |
| 01.17 | D – Lactic | AO1 | 1 | |

| 01.18 | D – Soya | AO1 | 1 |
|-------|------------------|-----|---|
| 01.19 | C – Profiteroles | AO1 | 1 |
| 01.20 | C – milk | AO1 | 1 |

| Part 1 | Marking guidance State three food safety points to consider when buying fresh fish. | Total marks |
|-----------|--|--|
| 1 | fish. | 3 |
| | Marking guidance | |
| | Marking guidance | |
| | Allow 1 mark per valid point. | |
| | This question is assessed against AO1(a). | |
| | Indicative Content | |
| | Temperature control – at time of purchase and transport home: | |
| | fish stored out of the temperature danger zone: 5°C to 63°C date marks/'use by' dates for fresh fish. covering foods – should be wrapped well to avoid leaking on journey home. | |
| | Is it being sold in a clean environment? Is the fish handled hygienically at the point of sale? | |
| | In addition – points linked to fish in particular – eg smell of fish – should smell of the sea, not strong fish odour. bright, clear eye, not sunken. firm flesh. moist skin but not slimy. gills – bright coloured. bright scales attached to the skin. | |
| | Full marks can be awarded without directly referring to fish. | |
| | Any other relevant and correct response can be credited. | |
| | | This question is assessed against AO1(a). Indicative Content Temperature control – at time of purchase and transport home: • chilling: 0 to below 5°C. • fish stored out of the temperature danger zone: 5°C to 63°C • date marks/'use by' dates for fresh fish. • covering foods – should be wrapped well to avoid leaking on journey home. Is it being sold in a clean environment? Is the fish handled hygienically at the point of sale? In addition – points linked to fish in particular – eg • smell of fish – should smell of the sea, not strong fish odour. • bright, clear eye, not sunken. • firm flesh. • moist skin but not slimy. • gills – bright coloured. • bright scales attached to the skin. Full marks can be awarded without directly referring to fish. |

| Qu | Part | Marking guidance | Total marks |
|----|------|--|----------------|
| 02 | 2 | Explain the term sustainable fishing. | 2 |
| | | Marking guidance | |
| | | 1 mark per valid point, or 2 marks for 1 valid point which is explained. | |
| | | This question is assessed against AO2. | |
| | | Indicative content | |
| | | Sustainable fishing means: a way of fishing responsibly. conservation of fish stocks. conserve different varieties of fish – long term. respects habitats/ecology and the sea environment. prevents overfishing: which is when more fish are caught than can be replaced. governments set quotas to prevent overfishing helps fish stocks to recover eg cod. fishing net size allows smallest fish to escape. maintains livelihoods of people who depend on fishing. | |
| | | Any other relevant and correct response can be credited. | |

| Qu | Part | Marking guidance | Total marks |
|----|------|--|----------------|
| 02 | 3 | Explain why the Eatwell Guide recommends eating two portions of fish each week, one of which is oily. | 4 |
| | | Marking guidance | |
| | | 1 mark per valid point or 2 marks for a valid point which is explained/developed well. | |
| | | This question is assessed against AO2. | |
| | | Indicative Content | |
| | | Eating fish contributes to a healthy balanced diet. Fish is a good source of (HBV) protein for growth and repair. Fish can be a relatively cheap source of protein eg canned tuna, compared to meat. White fish are low in fat, but high in protein. Oily fish are rich in omega 3 fatty acids – may help to prevent CHD. Increases HDL (good) cholesterol. | |

| As part of a healthy diet fish can reduce the risk of cardiovascular disease/helps protect against heart attack. Good for brain health and development. Good source of vitamins - A, B group, D, K. eg contributes to vision development. Minerals – Calcium, phosphorus, iron and iodine eg strong bones. Low in calories. Sustainability – fish has a lower carbon footprint than meat. | |
|--|--|
| Any other relevant and correct response can be credited. | |

| Qu | Part | Marking guidance | Total marks |
|----|------|---|----------------|
| 02 | 4 | Explain the food term temperature danger zone when storing and cooking beef burgers. | 4 |
| | | Marking guidance | |
| | | 1 mark per valid point or 2 marks for a valid point which is explained/developed well. | |
| | | This question is assessed against AO1(b). | |
| | | Indicative content | |
| | | Keeping beef burgers out of the temperature danger zone helps to prevent food poisoning. | |
| | | The temperature danger zone is 'the temperatures between 5°C and 63°C, where bacteria can multiply'. | |
| | | Bacteria grow very slowly, or do not grow at all at temperatures below 5°C. | |
| | | No bacteria grow at temperatures above 63°C. Bacteria will multiply the fastest at around body temperature of 37°C. | |
| | | Keep prepared food out of the temperature danger zone. Store raw burgers below 5°C. | |
| | | Cook burgers to 75°C or above. Take care if barbecuing to avoid overcooking the outside and undercooking the inside. | |
| | | Allow frozen burgers to defrost fully in the fridge before cooking. | |
| | | For full marks, the correct range of 5°C to 63°C should be stated. | |
| | | Any other relevant and correct response can be credited. Accept comments linked to frozen storage. | |

| Qu | Part | Marking guidance | Total marks |
|----|------|---|----------------|
| 03 | 1 | Amy, a 10-year-old girl, takes the same packed lunch to school every day. | 12 |
| | | Information about this packed lunch is given below. | |
| | | Using this information and your knowledge of nutrition and the healthy eating guidelines: | |
| | | Analyse the suitability of this packed lunch for Amy. | |
| | | Evaluate and explain how this packed lunch could be improved to meet current healthy eating guidelines. | |
| | | Marking guidance | |
| | | This question is assessed against AO4(a) and AO4(b). | |
| | | Responses will include very good knowledge and understanding related to the suitability of the packed lunch for Amy, considering nutrition and healthy eating guidelines. There are very good justifications of how the packed lunch could be improved to meet the current healthy eating guidelines. There will be a very good balance between analysis and evaluation. Analysis of the packed lunch is very good and refers to a wide range of points from the indicative content related. | |
| | | a wide range of points from the indicative content related to the packed lunch and healthy eating guidelines. Evaluation makes very good judgements and conclusions related to the changes required to improve the packed lunch for Amy. A wide range of justified and accurate improvements, related to current healthy eating guidelines are made, which are closely linked to the packed lunch analysis. | |
| | | Responses will include good knowledge and understanding related to the suitability of the packed lunch for Amy, considering nutrition and healthy eating guidelines. There are explanations and justification of how the packed lunch could be improved to meet the current healthy eating guidelines. There will be a good balance between analysis and evaluation. | |
| | | Analysis of the packed lunch is good and refers to a range of points relating to the nutrition and the healthy eating guidelines. Evaluation makes good judgements and conclusions related to the changes required to improve the packed lunch for Amy. A range of justified and accurate improvements, related to current healthy eating | |

| guidelines are made, which are closely linked to the packed lunch analysis. | |
|---|----------------|
| Responses will include basic knowledge and understanding related to the suitability of the packed lunch for Amy, which may consider nutrition and healthy eating guidelines. Explanations and justification (if any) of how the packed lunch could be improved to meet the current healthy eating guidelines. There will be an imbalance between analysis and evaluation. Analysis of the packed lunch is basic and may refer to nutrition and/or healthy eating guidelines Evaluation makes basic judgements and conclusions related to the changes required to improve the packed lunch for Amy. There may be one or more justified improvements, related to current healthy eating guidelines. | 1 – 4 Marks |
| Nothing worthy of credit. | 0 Marks |

Indicative Content

<u>Analysis</u>

Analyse the suitability of the packed lunch for Amy.

Reference can be made to individual items or the packed lunch as a whole.

Negative aspects – Why the packed lunch is **unsuitable** for Amy

- The packed lunch does not meet the Eatwell guide recommendations.
- It lacks the correct portions of fresh fruit and vegetables.
- It is too high in saturated fat which can lead to becoming overweight, obesity and long term can lead to heart disease, type 2 diabetes in later life.
- It is too high in sugar which leads to tooth decay, weight gain, obesity, type 2 diabetes and cardiovascular disease in later life.
- It is too high in salt which can cause excessive thirst, kidney problems and hypertension and high blood pressure in later life.
- There is a lack of dietary fibre / NSP in the packed lunch either from wholegrains sources or fruit and vegetable sources.
- It is too high in calories and processed carbohydrates which can lead to obesity.
- Amy's physical activity level (PAL) may be too low for this packed lunch, which contains several energy dense foods.
- There is a lack of vitamin C which is a water-soluble vitamin required for absorption of iron, to maintain connective tissue, skin and gums.

- There is a lack of iron in the packed lunch which can cause iron deficiency anaemia.
- The packed lunch is full of highly processed foods which are not natural and often contain lots of additives, colourings, flavourings and preservatives which can often lead to hyperactivity in children.
- A diet of highly processed foods lacking in fibre can cause constipation in children.

Positive aspects – Why the packed lunch is **suitable** for Amy

- Protein bread, cheese.
- Fat butter, cheese, crisps, cereal bar.
- Carbohydrate bread, crisps, cereal bar, sugar in cereal bar, sweets and lemonade.
- Vitamins B group vitamins in white bread, vitamins A and D in the butter.
- Minerals Iron in cereal bar and white bread. Calcium in white bread and cheese.
- Fibre crisps and cereal bar.

Amy's physical activity level (PAL) may be high, therefore this packed lunch, which contains several energy dense foods, would be suitable.

Evaluation

Evaluate and explain how the packed lunch could be adapted to meet current healthy eating guidelines.

- Increase the dietary fibre by using wholemeal, granary or brown bread to aid digestion and absorption of nutrients and prevent constipation. Adding dried fruits such as raisins or sultanas to the cereal bar to increase dietary fibre and prevent constipation.
- Increase the fruit and vegetables in the lunchbox by substituting the sweets for fruits or vegetables such as apples, satsumas, bananas, grapes, carrot sticks etc.
- Increase the iron content by adding ingredients to filling of sandwich red meat, eggs, add dried fruit as a snack, have some pulses or lentils in a salad or hummus. Substitute the sandwich with hummus, vegetable sticks and wholemeal pitta bread.
- Reduce the saturated fat content of the packed lunch by using lower fat cheese such as cottage cheese, lower fat Cheddar cheese or Edam cheese as a sandwich filling.
- Add some salad vegetables to the sandwich such as lettuce, tomatoes or cucumber to increase Vitamin C and dietary content of packed lunch.
- Include a vegetable or fruit salad in the lunch box eg pasta salad, couscous or fruit salad.
- Include another source of calcium for strong bones and teeth such as a low fat / sugar fruit yoghurt or a drink of milk.

- Have a bottle of water, sugar free or fruit smoothie instead of fizzy lemonade drink to reduce the free sugar content of the packed lunch.
- Have a lower sugar alternative to the cereal bar such as malt loaf, fruit loaf, fruit muffin etc which include dried fruit or fresh fruit.
- Have a lower salt alternative to the crisps such as plain rice cakes, plain oat cakes, lower salt crispbreads.
- Adjust the overall energy content of the packed lunch to match Amy's PAL.

Any other relevant and correct response can be credited.

| Qu | Part | Marking guidance | Total marks |
|----|------|--|----------------|
| 03 | 2 | Give three functions of fat in the diet. | 3 |
| | | Marking guidance | |
| | | Award one mark per valid point. | |
| | | This question is assessed against AO1(a). | |
| | | Indicative Content | |
| | | A concentrated source of (very slow release) energy. Makes body cells. Keeps the body warm/insulates/forms adipose tissue under the skin. Protects internal organs, eg kidneys. Provides the fat-soluble vitamins. Provides vitamins – A, D, E and K. Provides the essential fatty acids. Provide a feeling of 'fullness' spends longer in the stomach. | |
| | | Any other relevant and correct response can be credited. | |

| Qu | Part | Marking guidance | | Total marks |
|----|------|---|----------------|----------------|
| 03 | 3 | Explain the term protein complementation. | | 6 |
| | | Give examples in your answer. | | |
| | | Marking guidance | | |
| | | This question is assessed against AO2. | | |
| | | Responses show thorough knowledge and understanding of protein complementation. Detailed and factual explanation with supporting examples. Very good use of subject specific terminology. | 5 – 6 Marks | |
| | | Responses show good knowledge and understanding of protein complementation. Factual explanation with supporting example. Good use of subject specific terminology. | 3 – 4 Marks | |
| | | Responses show basic knowledge and understanding of protein complementation. Limited explanation and there may be no example. Limited use of subject specific terminology. | 1 – 2 Marks | |
| | | No answer worthy of credit. | 0 Marks | |

Indicative Content

Explain the term protein complementation

Combining low biological foods (LBV) together to produce high biological value (HBV) dishes/meals.

Low biological value protein foods lack one or more of the essential amino acids, but when combined together in a meal, they provide all of the essential amino acids and the meal/dish becomes high biological value.

<u>Give examples of dishes/meals which show protein</u> complementation

- Beans on toast.
- Lentil dhal/soup and bread/rice/naan/chapati.
- Rice and peas/beans.
- Hummus and pitta bread/bread.
- Peanut butter on toast or sandwich.
- Vegetable chilli tortilla wrap.

Any other relevant and correct response can be credited

| Qu | Part | Marking guidance | | Total marks |
|----|------|--|----------------|----------------|
| 03 | 4 | Explain what dietary advice you would give to teenag prevent iron deficiency anaemia. | e girls to | 6 |
| | | Marking guidance | | |
| | | This question is assessed against AO2. | | |
| | | Responses show thorough knowledge and understanding of iron deficiency anaemia. Detailed and factual descriptions are given which relate to anaemia and clearly explain advice for relevant food choice for teenage girls. | 5 – 6 marks | |
| | | Responses show good knowledge and understanding of iron deficiency anaemia. Factual responses are given, some of which relate to anaemia and describe some advice for food choice for teenage girls. | 3 – 4 marks | |
| | | Responses show basic knowledge and understanding of iron deficiency anaemia. Limited descriptions are given which attempt to describe food choice for teenage girls. | 1 – 2 marks | |
| | | No answer worthy of credit. | 0 marks | |

Indicative content

Response may include the function(s) of iron:

- To keep red blood cells healthy.
- iron makes the haemoglobin in red blood cells.
- The haemoglobin carries oxygen around the body.
- Teenage girls need more iron than teenage boys due to menstruation.

Include ingredients which provide good sources of iron -

Animal Sources

- Eggs
- Liver
- Meat

Vegetable Sources

- · Beans, peas, lentils
- Dark chocolate
- Dried fruit
- Fortified breakfast cereals, flour and bread
- Green leafy vegetables eg spinach
- Nuts
- Pulses
- · Wholegrain cereals
- Make sure the diet contains plenty of iron rich food and vitamin C rich foods preferably eaten together.
- Vitamin C helps with the absorption of iron.
- Combine ingredients Vitamin C helps the body to absorb iron eg drink orange juice with breakfast cereal.
- Avoid drinks with tannin eg tea, coffee which inhibit the absorption of iron.

Teenage girls iron RNI = 14.8 mg Teenage boys iron RNI = 11.3 mg

Any other relevant and correct response can be credited.

| Qu | Part | Marking guidance | | Total marks |
|----|------|--|------------------------------|----------------|
| 04 | 1 | Explain how different moral and ethical beliefs can af food choices we make. Marking guidance | fect the | 6 |
| | | This question is assessed against AO2. | | |
| | | Responses show thorough knowledge and understanding of how a wide range of moral and ethical beliefs affect the foods we choose. Detailed and factual explanations are given. | 5 – 6 Marks | |
| | | Responses show good knowledge and understanding of how a range moral and ethical beliefs affect the foods we choose. Some explanations are given Responses show basic knowledge and understanding | 3 – 4 Marks | |
| | | of how some moral and ethical beliefs affect the foods we choose. Limited explanations are given | Marks | |
| | | No answer worthy of credit. | 0 Marks | |
| | | Indicative Content | | |
| | | Animal welfare: Vegetarian/vegan diets eg to avoid killing animals. Increase in organic alternatives as intensive farming us pesticides, chemicals, antibiotics and growth hormones animals. Consumers consider: schemes such as RSPCA assure Tractor, Assured Food Standards, Lion stamp on eggs Choose free range alternatives. Eating fewer animal foods and more plant foods is an i trend to avoid animal slaughter and rearing animals for benefit e.g. the dairy industry. | s in ed, Red ncreasing | |
| | | Fairtrade: Ensuring a fair price for the farmers who grow/produce they have a living wage. Money is also used for local communities, education. Consumers are prepared to pay more for Fairtrade foo producers. | | |
| | | Local and seasonal produce: Buying local food produce reduces food miles, and so carbon footprint. Supports the local economy. | lowers the | |
| | | Organic: • Foods grown without artificial fertilisers/herbicides/pest • Grown to promote natural habitats for wildlife. • Routine use of antibiotics is not allowed. | icides. | |

| Growth hormones are not allowed. |
|--|
| Genetically Modified (GM): |
| Some people avoid GM foods as they are concerned with how these foods can affect the environment. |
| Interference with nature and natural reproduction. Concerns about impact on ecology and health. |
| |
| Reference to religious or cultural beliefs will be acknowledged. |
| Any other relevant and correct response can be credited. |

| Qu Par | Marking guidance | Total marks |
|--------|---|----------------|
| 04 2 | Give three advantages and three disadvantages of intensive farming. | 6 |
| | Marking guidance | |
| | Award one mark per valid point. | |
| | This question is assessed against AO2. | |
| | Indicative Content | |
| | <u>Advantages</u> | |
| | Produces a higher yield than traditional farming. Less land is needed. Helps to prevent food shortages. Provides cheaper food. More profitable. Farming system must meet EPA (Environmental Protection Agency) Standards. | |
| | <u>Disadvantages</u> | |
| | Restricted space for animals. Disease can spread more easily due to restricted space for animals. Animal welfare is a concern. Beaks and wings can be clipped. Use of chemicals, herbicides and pesticides, artificial fertilisers. Higher pollution levels from chemicals used on land. Impact on environment as more electricity is used. Bigger carbon footprint. Deforestation to increase crop planting and resulting in poor environment. | |

| Qu | Part | Marking guidance | Total marks |
|----|------|--|----------------|
| 04 | 3 | Explain how consumers can reduce the amount of single-use plastic packaging when buying food. | 4 |
| | | Marking guidance | |
| | | This question is assessed against AO2. | |
| | | Indicative Content | |
| | | Award one mark for each correct response or two marks for an extended answer. | |
| | | Buy loose fruit and vegetables. Take own re-usable bags when buying fruit and vegetables. Choose foods which don't use plastic packaging. Choose biodegradable packaging instead of plastic. Take own containers when buying food, if allowed. Use a reusable water bottle or coffee cup when buying drinks or refreshments. Avoid buying frozen foods as their packaging is mostly plastic and often cardboard coated in a layer of plastic. Buy foods in cardboard, tins or glass which can easily be recycled. Avoid ingredients with excess packaging eg multi pack tins or cans will have up to 3 layers of different packaging and an outer plastic package around tin. Use glass milk bottles. Look for recycle symbol on plastic packaging. Only buy what is needed. | |
| | | Any other relevant and correct response can be credited. | |

| Qu | Part | Marking guidance | Total marks |
|----|------|---|----------------|
| 05 | | Coronary heart disease and high blood pressure are major risks affecting long-term health. | 8 |
| | | Analyse the reasons for the increase in coronary heart disease and high blood pressure in the UK. | |
| | | Evaluate how diet and lifestyle choices can reduce these health risks. | |
| | | Marking guidance | |
| | | This question is assessed against AO4(a) and AO4(b). | |

| Responses will include very good explanations showing very good knowledge and understanding of the | 7 – 8 Marks |
|--|----------------|
| dietary/lifestyle choices which cause heart and circulatory diseases. | |
| There will be a very good balance between analysis and evaluation. | |
| Analysis is very good and refers to a wide range of | |
| reasons related to the high number of heart and circulatory health problems. | |
| Evaluation includes very good judgements and | |
| accurate conclusions are drawn of how diet and lifestyle choices can reduce heart and circulatory diseases linked to analysis. | |
| Responses will include good explanations showing | 5 – 6 |
| good knowledge and understanding of the | Marks |
| dietary/lifestyle choices which cause heart and | |
| circulatory diseases. Response may be stronger in either analysis or | |
| evaluation. | |
| Analysis is good and refers to a range of reasons | |
| related to the high number of heart and circulatory | |
| health problems. Evaluation includes good judgements and conclusions | |
| are drawn of how diet and lifestyle choices can reduce | |
| heart and circulatory diseases linked to analysis. | |
| Response will include basic explanations which show | 3 – 4 |
| basic knowledge and understanding of the dietary or | Marks |
| lifestyle choices which cause heart and circulatory diseases. | |
| There may be an imbalance between analysis and | |
| evaluation where one aspect may be omitted or | |
| stronger in one aspect. | |
| Analysis is basic and refers to a range of reasons related to the high number of heart and circulatory | |
| health problems. | |
| Evaluation includes basic judgements and some | |
| conclusions are drawn of how diet and lifestyle choices | |
| can reduce heart and circulatory diseases linked to analysis. | |
| Responses will include limited/few explanations | 1 – 2 |
| showing limited knowledge and understanding of the | Marks |
| dietary needs of causes of heart and circulatory | |
| diseases. Analysis is limited and refers to a range of factors | |
| related to the high number of heart and circulatory | |
| health problems. | |
| Evaluation includes limited/few judgements and | |
| conclusions may be drawn of how diet and lifestyle | |
| choices can reduce heart and circulatory diseases linked to analysis. | |
| No answer worthy of credit. | 0 |
| . to allettor worthy or oround | Marks |

Indicative Content

Analysis

A main reason for the increase in coronary heart disease and high blood pressure.

Contributing factors are:

- · being overweight
- obesity
- high cholesterol (LDL)
- diet high in saturated fat
- diet high in salt (sodium)
- an unbalanced diet not based upon the Eatwell Guide.
- lack of fibre in the diet
- diets not including the recommended 5 portions of fruit and vegetables
- a diet of refined carbohydrates (white flour, white bread, white rice, white pasta etc.) and free sugars.
- increase in the consumption of processed foods/ready meals/take away foods
- eating too many sugary, fatty, salty foods
- sedentary lifestyle and lack of exercise.
- diabetes (examiners accept diabetes, type 1 diabetes, type 2 diabetes)
- smoking
- over 40 years old
- excess alcohol consumption
- lack of education about healthy diets.
- a stressful job/circumstances
- low income.

Evaluation

Diet

- Eat less salt to reduce blood pressure.
- Eat less saturated fat to reduce the risk of heart disease and stroke.
- Follow the Eatwell Guide.
- Eat 5 a day fruit and veg. 80g servings X 5.
- Eat more starchy carbohydrates especially wholegrain versions e.g. brown rice instead of white rice. Eat fewer free sugars.
- Read food labels

Lifestyle

- Stay a healthy weight.
- Exercise more.

| Stop smoking. Reduce alcohol consumption. Find out about diet and exercise and its benefits to the heart. Spend money on food wisely – eg vegetable soups instead of using fast food outlets. |
|---|
| Any other relevant and correct response can be credited. |

| Qu | Part | Marking guidance | Total marks |
|----|------|--|----------------|
| 06 | 1 | Figure 1 shows the parts of a wheat grain. Milling is the process that turns wheat grain into flour Give two reasons for each milling stage. The first one has been done for you. [4 marks] This question is assessed against AO1A. Cleaning the grain 1 To remove dirt 2 To soften the grain | 4 |
| | | Crushing and rolling the grain 1. To loosen the outer layer 2. To help separate the grain 3. To split the grain 4. To make it finer (only credit this once) 5. To peel open the grain 6. To release the endosperm 7. To release the wheatgerm 8. To release the bran | |

Sieving the crushed grain

- 1. To separate the different components
- 2. To make different flours
- 3. To separate the bran
- 4. To separate the wheat germ
- 5. To separate the endosperm
- 6. To make the flour whiter
- 7. To make it finer (only credit this once)

Note for examiners – allow repetition of response between *crushing and rolling the grain* and *sieving the crushed grain*, however, responses **must not** be identical.

Any other relevant and correct response can be credited.

| Qu | Part | Marking guidance | | Total marks |
|----|------|--|---|----------------|
| 06 | 2 | The following ingredients are used to make bread: • warm water • bread flour • salt • yeast Complete the table to show two functional and/or chemical properties of each ingredient. The first one has been done for you. Marking guidance | | 6 |
| | | | | |
| | | Ingredient | Functional / Chemical Properties | |
| | | Warm water (Example) | Binds the flour and other ingredients together Creates steam during baking | |
| | | Bread flour (2 marks) | Forms the structure/shape of the bread (due to its high gluten content) Gluten is formed from two proteins, gliadin and glutenin Gluten is stretchy and elastic | |

| Salt (2 marks) | Gluten traps gas produced by yeast Starch gelatinises Starch dextrinises Controls the rate at which the yeast ferments the dough Strengthens the gluten in the dough Helps to retain moisture Adds flavour |
|-------------------|--|
| Yeast (2 marks) | To aerate the bread dough A biological raising agent To produce carbon dioxide during fermentation Yeast requires moisture, food, warmth and time to ferment To leaven/rise the bread dough |
| Any other rele | vant and correct response can be credited |

| Qu | Part | Marking guid | ance | Total marks | | | |
|------|------|--|---|----------------|--|--|--|
| 06 3 | | Cheese scon | es were made which had the following faults: | 6 | | | |
| | | unpleasantheavy textuneven col | ıre | | | | |
| | | Complete the table to show two possible reasons for each fault. Do not repeat your answers. | | | | | |
| | | | | | | | |
| | | Marking guidance | | | | | |
| | | This question is assessed against AO2. | | | | | |
| | | Faults | Reasons for faults | | | | |
| | | Unpleasant flavour | Incorrect raising agent – used only bicarbonate of soda. Too much raising agent/incorrect ratio. Incorrect ratio of flavouring(s) added. Overcooking or undercooking of the scones. Used out of date ingredients. | | | | |
| | | Heavy texture | Inaccurate weighing of ingredients Too much liquid/inaccurate measuring of liquid. Too much flour Flour not sifted | | | | |

| | Wrong flour used/not used self-raising which releases CO2 and allows the scones to have an open texture. Too much cheese added which has not allowed an open texture. Undercooking the scones. Temperature of oven too low. Using the wrong shelf on the oven. Opening the oven door during baking. |
|------------------|--|
| Uneven colour | Oven did not bake evenly. Scones packed too closely together on baking tray. Failed to turn the tray around half way through the baking process. Some scones were glazed and others weren't. Mixture not combined evenly (i.e. cheese not mixed through evenly) |