

**GCSE (9–1)**  
*Candidate Style Answer*

# FOOD PREPARATION AND NUTRITION

J309  
For first teaching in 2016

## Question 9 – Level 4 sample answer with commentary

Version 1



GCSE (9–1)  
***FOOD PREPARATION AND NUTRITION***

Sample answer with commentary

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**Sample question 9 with commentary**

| <b>Question 9: Childhood obesity rates are increasing. Assess the factors which can contribute to diet related childhood obesity and the impact this could have on later life. [12]</b>  |   |
|--|---|
| <b>Sample answer – Level 4</b>   | <b>Commentary on the answer</b>   |
| <p>Childhood obesity is caused by the consumption of an unbalanced diet resulting in the child's energy intake being greater than their energy output. If the excess energy that the body does not need is not expended, then it will be stored as body fat and can result in the child gaining weight if this pattern of eating is maintained overtime.</p> <p>Eating too many sugary or fatty foods is a large contributory factor towards causing this energy imbalance due to their high calorie content. Busier lifestyles have caused families to place a greater reliance on processed and fast foods, which tend to be high in sugar and fat. Examples would include ready meals such as curries or pasta based dishes and takeaways such as McDonalds or KFC. These products are more convenient as they are quick and easy to prepare and serve. This makes them an ideal choice for busy working parents, who have little time to shop or make the family meals. The wide range of culinary foods available, such as Chinese, Indian and Italian dishes, also makes it easier for parents to purchase them on a regular basis without having complaints from their children that they are being served the same foods over and over again.</p> <p>Nutritional considerations are therefore overlooked in favour of the convenience that these meals provide, but if children are frequently served these foods then this would significantly contribute to an increase in their overall energy intake especially from the higher fat content that they tend to contain.</p> <p>Busy lifestyles can contribute to reducing a parent's ability to cook if they have limited time available to regularly practise basic cooking skills. This results in pre-prepared meals being purchased more frequently, which further reduces their expertise and knowledge of how to prepare family meals and may erode confidence in their ability to do so. It is harder to understand exactly how convenience foods are made compared to freshly preparing the food at home where the person knows exactly what goes into making the dish. Confusion around the nutritional labelling of shop bought products can also make it difficult for the parents or child to determine whether the product is nutritionally balanced. An example of this would be where foods labelled low fat are often high in sugar or where sugar is labelled using names that are not familiar to the person so are effectively hidden. For example, sugar can appear on the label as corn syrup or fructose, so the person may not realise that the product is actually high in sugar if these are terms that they are not familiar with. Parents may, therefore, think that they are providing healthy food options to their children, but be unaware that the product is still high in calories.</p> | <p>This is a comprehensive answer which would be awarded a level 4. The candidate has started by giving an accurate definition of childhood obesity which paves the way to explain ways in which a child could receive an excess energy intake.</p> <p>The candidate has correctly identified that the main reason for an excess energy intake is the consumption of foods high in sugar and fat. They could have improved on this further by stating what percentage of the energy intake should come from carbohydrates and fat. Lower level answers would confuse which nutritional implications have an impact on obesity. One common misconception is that a high salt intake causes obesity.</p> <p>The answer then demonstrates a high level of perceptiveness in understanding that there are numerous issues which contribute to eating this type of diet. A wide range of factors are accurately identified and fully explained throughout the answer demonstrating depth of knowledge and understanding. The candidate always refers back to the question by offering suggestions as to why each point raised would have an impact on obesity. The focus is always maintained on childhood obesity rather than obesity across all age groups.</p> <p>A lower level answer would identify fewer contributory factors which would be written in a list format rather than identifying the link back to why each of these would impact on increased childhood obesity rates. There may also be inaccuracy in the points raised.</p> <p>The candidate recognises that the factors discussed do not work in isolation, but are interconnected with each other to form a complex overall contributory pattern to the problem of childhood obesity. This is apparent where the candidate appreciates that children do not become obese purely through their own food choices, but are influenced by family eating patterns and parental ability to cook meals. The candidate has also identified the impact numerous reasons for purchasing convenience foods could have on each other. The approach to explaining this is systematically executed where each point raised is concisely described and develops on from the previous point. This is apparent where the candidate explains that convenience foods are often purchased due to busier lifestyles, but follows on to say that this restricts the time people have available to cook for themselves, which can then erode confidence in their ability to cook, further increasing their reliance on purchasing convenience foods which additionally impacts on their appreciation of how to comply a balanced meal.</p> |

Lack of nutritional knowledge would also make it difficult for a parent to understand how to make their own healthy balanced meals and the child to then be educated in which food choices are healthier. In low income families healthier food choices such as fruits and vegetables are an expensive option, so they will tend to bulk out their diet on cheaper high calorie foods, which are sold at much lower prices. Fast food manufacturer's adverts for meal deals are a contributing factor in persuading the purchase of cheaper processed and fast foods. Supermarkets also encourage this buying pattern by promoting a three course meal and drink for under £5 to £10 pounds. It would be more expensive to buy all the individual ingredients to make the meal yourself than to buy it ready made.

Advertising also plays on the emotional connection of sugary and fatty foods being given to children as treats. This is especially true where sweets and cakes are used to award children for good behaviour or work. This is a practice that children are exposed to from an early age and this association can lead to children resorting to high calorie foods as comfort foods, which becomes habit forming in later life making it difficult for the individual to lose weight.

The range of snacks foods available has grown in response to the increased trend for children to 'graze' on foods between meals. Typical foods that children snack on include sweets, crisps, chocolate bars and fizzy drinks, which have substantially high quantities of sugar and fat. As children get older they tend to have more access to money and freedom to buy their own foods, of which snacks form a large proportion. The purchase of these can be influenced by what their friends eat or the ease with which they can buy them when travelling to or from school. Parents may not always be aware exactly what their children are eating. The consumption of snack products can become additive, resulting in overeating which is another contributory factor to childhood obesity. Regular eating of snack products will significantly increase the amount of sugar and fat in a child's diet. Portion sizes of both snacks and meals have also considerably increased overtime. The increased amounts of food consumed, due to larger portions and grazing in between meals, coupled with the higher energy intake of these types of food are major concerns with the rise in childhood obesity rates.

All the above factors lead to children consuming a high calorie diet and if children also lead a sedentary life then they will not be burning off the excess energy that they are consuming. Children are generally becoming less active for numerous reasons including being entertained by watching more television or playing computer games rather than playing outdoors or being transported by car to school instead of walking. Lack of exercise coupled with a high energy diet would therefore lead to obesity. Regular overconsumption of high calorie foods in children results in poor eating habits being formed which are difficult to change in later life. These bad habits tend to be passed down through families. Obesity can cause people to feel unhappy and have a lack of confidence in their body image leading to low self-esteem. When feeling emotionally low, obese people often resort to eating high calorie comforting foods, but this creates a viscous circle as these

The candidate has perceptively recognised that food choices are influenced by numerous personal, social and economic factors including cost, enjoyment, preference, availability, time of day, activity, celebration or occasion, food labelling and marketing.

The candidate has recognised that childhood spans a wide age range and food choices will therefore be influenced by the age of the child.

The information is presented in a clear and organised way with each discussion point leading into the next. A lower level answer would tend to list the points raised and resort to repetition rather than building on the answer.

Appropriate examples are given throughout the answer to support all points raised and explained in detail.

The candidate has appreciated that although lack of exercise in children is a major contributory factor to obesity rates it is not a diet related factor if discussed in isolation.

Lower level answers would discuss lack of exercise without relating it back to dietary intake.

The answer to the second part of the question which relates to the impact that obesity has on later life builds on from the previous section in terms of recognising that eating habits formed at an early age are difficult to lose at we get older.

The candidate has identified a comprehensive range of health issues associated with obesity in later life and how the impact of these often worsens the obesity problem.

A whole range of specialist terms are used within this part of the answer with precision.

foods increase their weight further. The health issues associated with obesity can be life threatening. Carrying excess weight puts a strain on the organs of the body, such as the heart which has to work harder to supply the extra oxygen and nutrients needed by tissues. This can cause coronary heart disease and high blood pressure. The person is also more likely to suffer from breathlessness during exertion as heart and lungs have to work harder to maintain oxygen supply. This means that they are more likely to tire easily. Other complications include the onset of type 2 diabetes and indigestion due to the digestive glands being overworked or ceasing to function. Carrying excess weight also puts a strain on joints, such as the back, knees and hip. The pain caused by this can lead to reduced mobility of the person, which in turn results in less exercise being undertaken which makes the obesity problem much worse.

If obesity occurs in childhood then it can be difficult for the individual to lose weight as an adult due to bad eating habits being determined from an early age. This can result in a number of diet related illnesses occurring in later life which may be difficult to cure if weight loss becomes an issue.

The candidate has summarised the answer relating the difficulties in curing health problems that occur in later life back to the setting of bad eating habits as a child.

The candidate demonstrates the accurate use of spelling, punctuation and grammar throughout the answer.

**Factors which contribute to obesity:**Not eating a balanced diet:

- Imbalance between energy intake and energy output leading to excess energy being stored as body fat/if you eat and drink foods higher in energy than the body needs, the energy is stored as fat and you gain weight.
- Increased portion size of meals.
- Consuming too many sugary foods, e.g. sweets/fizzy drinks (carbohydrates should only make up 50% of energy intake, 39% being from starches).
- Consuming too many fatty foods (fat should only make up 35% or less of energy intake).
- Amount of calories needed by children per day (this would vary depending on the child's age).
- Increased consumption of processed foods/fast foods high in sugar and/or fat due to convenience/busy lifestyles.
- Economics: healthier foods such as fruits and vegetables can be more expensive than high sugary/fatty foods/people with low incomes tend to eat more unhealthy food.
- Poor understanding of food labels, e.g. low fat products are often high in sugar/use of hidden sugars on food labels.
- Sugary/fatty foods given as treats/awards. These then become comforting foods and are associated with relieving anxiety, depression, boredom or loneliness.

Changing lifestyle:

- Children leading more sedentary lives, leading to the necessity to reduce calorie consumption due to reduced energy requirements. Obesity can occur if this is not taken into account/ lack of exercise can be due to changes in entertainment, e.g. TV/computer usage increased, or increased use of cars to transport to and from school/activities which reduces the time spent walking to these/lack of sports facilities in local areas or the cost of these may be too high.
- Inactive parents who do not encourage children to take part in sports outside school.
- Children play outdoors less, so are less active.
- Poor or lack of cooking skills of parents or child/lack of time for parents or child to cook balanced meals causing greater reliance on the consumption of processed foods/fast foods.
- Increased range/availability of convenience foods and fast food eating outlets has led to more takeaways being eaten by families.
- Older children have greater access to money/freedom to buy own foods/snacks which may not always be a healthy option.
- Increased consumption of snack products which results in overeating and snack foods can be high in sugar and/or fat. Snacks eaten in preference to regular meals/increased 'grazing' between meals.
- Lack of time for shopping resulting in the purchase of quick-to-prepare meals which require little food preparation and cooking. Convenience foods are often high in fat and sugar.

Advertising:

- Impact of advertising on choice of food/persuasion to buy more sugary or fatty foods, especially snacks, which appeal to children.

This question is marked according to quality of response

0 = no response worthy of credit

**Level 4 (10–12 marks)**

The candidate gives a comprehensive description and explanation; examples will be detailed and relevant. The information will be presented in a clear and organised way. A whole range of specialist terms are used with precision. The candidate can demonstrate the accurate use of spelling, punctuation and grammar.

**Level 3 (8–9 marks)**

The candidate gives a detailed description and explanation, examples given will be relevant. Information will be offered to support the answer but in general terms with little detail. The information will be offered in a structured format. The candidate can use a range of specialist terms with facility. There may be occasional errors in spelling, punctuation and grammar.

**Level 2 (4–7 marks)**

The candidate gives a description and may give some valid comments, some examples will be given. Some information will be relevant although may lack specific detail. The candidate uses some specialist terms although these may not always be used appropriately. There may be errors in spelling, punctuation and grammar.

**Level 1 (1–3 marks)**

The candidate makes general comments which may be list like. May give one or two suggestions, limited examples may be given. Facts may not always relate to the contents. Answers may be ambiguous or disorganised. There will be little or no use of specialist terms. Errors of grammar, punctuation and spellings may be intrusive.

**Impact on later life**

Bad habits formed when younger, set a pattern of poor eating habits in later life which are difficult to change.

Poor eating habits tend to be passed down through families.

Puts strain on the organs of the body.

Can cause heart disease (CHD) and high blood pressure – obesity causes a greater strain on the heart as the heart has to work harder to supply the extra oxygen and nutrients needed by tissues.

Type 2 diabetes.

Gall bladder stones.

Some cancers.

Can cause strokes.

Indigestion due to digestive glands being overworked or ceasing to function.

Osteoarthritis.

Varicose veins.

Breathlessness during exertion as heart and lungs has to work harder to maintain oxygen supply. Likely to tire more easily.

Chest infections.

Breathing problems.

Sleep apnea.

Increased sweating.

Fertility decreased.

Pregnancy complications.

Back and joint pain (hip and knee).

Lack of mobility – as body size increases then exercise levels will tend to fall which makes the problem of obesity worse.

Causes unhappiness and low self-esteem and may lead to stress, anxiety and depression due to lack of confidence in their body image.

Dental caries if obesity is caused by eating a high sugar diet.

**Do not credit lack of exercise on its own, reference must be related to dietary requirements.**

**Credit any relevant point raised.**



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