Food & Nutrition marking guide and response

External assessment 2024

Combination response (54 marks)

Assessment objectives

This assessment instrument is used to determine student achievement in the following objectives:

1. recognise and describe facts and principles related to the food system, food formulation and nutrition consumer markets
2. explain ideas and problems related to current and emerging nutrition consumer markets
3. analyse problems, information and data related to current and emerging nutrition consumer markets
4. determine solution requirements and criteria for nutrition consumer market problems
5. synthesise information and data for solutions related to nutrition consumer market problems
7. evaluate and refine ideas and solutions to make justified recommendations for enhancement.

Note: Unit objectives 6 and 8 are not assessed in this instrument.

Purpose

This document consists of a marking guide and a sample response.

The marking guide:

- provides a tool for calibrating external assessment markers to ensure reliability of results
- indicates the correlation, for each question, between mark allocation and qualities at each level of the mark range
- informs schools and students about how marks are matched to qualities in student responses.

The sample response:

- demonstrates the qualities of a high-level response
- has been annotated using the marking guide.

Mark allocation

Where a response does not meet any of the descriptors for a question or a criterion, a mark of '0' will be recorded.

Where no response to a question has been made, a mark of 'N' will be recorded.

Marking guide

Short response

Q	Sample response	The response:
1a)	Protein for growth of body tissues. Folate to help prevent birth defects. Iron to meet the needs of the developing foetus.	• explains the importance of one nutrient for pregnancy **[1 mark]** • explains the importance of a second nutrient for pregnancy **[1 mark]** • explains the importance of a third nutrient for pregnancy **[1 mark]**
1b)	The porridge is suitable for the pregnant NCM because of the amount of fibre (13.2 g/100 g and 5 modifying points), which is beneficial for preventing constipation during pregnancy.	• justifies the suitability of the porridge for the pregnant NCM **[1 mark]** • uses data from the NPSC calculation **[1 mark]**
2a)	I: The chicken breast should be replaced with skinless breast. II: The garlic salt should be replaced with garlic. III: The chicken should be dry fried in a non-stick pan.	• identifies one relevant alternative food component / procedure step **[1 mark]** • identifies a second relevant alternative food component / procedure step **[1 mark]** • identifies a third relevant alternative food component / procedure step **[1 mark]**

2b)	Alternative food component / procedure step I
	Nutritional outcome: reduces the amount of fat
	Sensory property: would impact appearance but other properties are unaffected
	
	Alternative food component / procedure step II
	Nutritional outcome: reduces sodium content
	Sensory property: retains the texture and garlic flavour of the product, no properties affected
	
	Alternative food component / procedure step III
	Nutritional outcome: reduces the amount of fat
	Sensory property: retains texture and appearance but reduces flavour, no other properties affected
		• justifies one alternative food component / procedure step in relation to
		  – a nutritional outcome **[1 mark]**
		  – a sensory property **[1 mark]**
		• justifies a second alternative food component / procedure step in relation to
		  – a nutritional outcome **[1 mark]**
		  – a sensory property **[1 mark]**
		• justifies a third alternative food component / procedure step in relation to
		  – a nutritional outcome **[1 mark]**
		  – a sensory property **[1 mark]**

Q	Sample response	The response:
3	Add nuts to increase energy content. Add grains (e.g. oats) to increase the complex carbohydrate level for sustained energy release.	• identifies one additional food component **[1 mark]** • justifies the first additional food component **[1 mark]** • identifies a second additional food component **[1 mark]** • justifies the second additional food component **[1 mark]**
4	The formulation is low in saturated fat/serve (2.6 g) as saturated fat is a high risk component. The formulation is low in kJ/serve (1580 kJ) and per 100 g (417 kJ)as this NCM can be overweight or obese. The formulation is a good source of fibre (7.6 g/serve) to support a reduction of cholesterol levels.	• provides one reason for formulation suitability using data **[1 mark]** • provides a second reason for formulation suitability using data **[1 mark]** • provides a third reason for formulation suitability using data **[1 mark]**

Extended response — Question 5

Criterion: Analyse the problem to determine the solution requirements

The response:	The response:

• provides viable solution requirements for the company that
  – represent all three current food trends **[1 mark]**
  – make the product suitable for the NCM **[1 mark]**
	• provides a viable solution requirement for the food allergic or intolerant NCM **[1 mark]**
	• provides a viable solution requirement for the overweight or obese NCM **[1 mark]**

Criterion: Analyse how prototype formulations meet the solution requirements of the NCM

The response, for Prototype 1:	The response, for Prototype 2:	The response, for Prototype 3:

• provides a critical analysis of the needs of the NCM using
  – the nutrition information panel **[1 mark]**
  – a reference to a potential allergen or intolerance **[1 mark]**
	• provides a critical analysis of the needs of the NCM using
	  – the nutrition information panel **[1 mark]**
	  – a reference to potential allergen or intolerance **[1 mark]**
		• provides a critical analysis of the needs of the NCM using
		  – the nutrition information panel **[1 mark]**
		  – a reference to potential allergen or intolerance **[1 mark]**

Criterion: Analyse how prototype formulations meet the NCM trends

The response
• provides a critical analysis of whether Prototype 1 meets the NCM trends **[1 mark]** • provides a critical analysis of whether Prototype 2 meets the NCM trends **[1 mark]** • provides a critical analysis of whether Prototype 3 meets the NCM trends **[1 mark]**

Criterion: Analyse prototype formulations for sensory profiling

The response, for Prototype 1:	The response, for Prototype 2:	The response, for Prototype 3:

• provides a critical analysis of the four sensory properties of the prototype that includes
  – aroma **[1 mark]**
  – texture **[1 mark]**
  – taste **[1 mark]**
  – appearance **[1 mark]**
	• provides a critical analysis of the four sensory properties of the prototype that includes
	  – aroma **[1 mark]**
	  – texture **[1 mark]**
	  – taste **[1 mark]**
	  – appearance **[1 mark]**
		• provides a critical analysis of the four sensory properties of the prototype that includes
		  – aroma **[1 mark]**
		  – texture **[1 mark]**
		  – taste **[1 mark]**
		  – appearance **[1 mark]**

Criterion: Evaluate and refine ideas and solutions to make justified recommendations for enhancement

The response:

• identifies prototype three as the best solution **[1 mark]**
• provides detailed justification that includes
  – appropriateness of the formulation for the NCM **[1 mark]**
  – evaluation of trends **[1 mark]**
  – sensory profiling data **[1 mark]**

The response:
• makes one effective recommendation for the enhancement of a prototype **[1 mark]** • justifies the recommendation with detailed and accurate data from the stimulus **[1 mark]** • makes a second effective recommendation for the enhancement of a prototype **[1 mark]** • justifies the recommendation with detailed and accurate data from the stimulus **[1 mark]**