

Food & Nutrition marking guide and response

Sample external assessment 2020

Combination response (95 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.

Introduction

The Queensland Curriculum and Assessment Authority (QCAA) has developed mock external assessments for each General senior syllabus subject to support the introduction of external assessment in Queensland.

An external assessment marking guide (EAMG) has been created specifically for each mock external assessment.

The mock external assessments and their marking guides were:

- developed in close consultation with subject matter experts drawn from schools, subject associations and universities
- aligned to the external assessment conditions and specifications in General senior syllabuses
- developed under secure conditions.

Purpose

This document consists of an EAMG and an annotated response.

The EAMG:

- 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.

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.

External assessment marking guide (EAMG)

Short response

Question	Sample response	The response	Mark
1	The purpose is to regulate food products to ensure they are fit for human consumption and legal sale, e.g. that food labels include: ingredients, nutritional content, NIP and NPCS.	• provides 6 points	6
		• provides 5 of the points	5
		• provides 4 of the points	4
		• provides 3 of the points	3
		• states 2 of the points	2
		• states 1 of the points	1
		• does not satisfy any of the descriptors.	0

Question	Sample response	The response	Mark
2	<p>The smoothie is not suitable because it is high in sugar at 4.1g per 100 ml. It does however contain 2.5 g fibre, with ingredients — mango, oat, flaxseeds. Because this is a beverage (category 1), dietary fibre is not included in the NPSC calculation. It is low in saturated fat as per the NIP panel (0.4 g per 100 ml). With protein of 3 g per 100 ml and energy of 425 kJ in the NIP, it scores 1 in NPSC data.</p>	<ul style="list-style-type: none"> identifies <ul style="list-style-type: none"> high in dietary fibre 3 other pieces of information explains each of the identified pieces of information 	8
		<ul style="list-style-type: none"> identifies <ul style="list-style-type: none"> high in dietary fibre 3 other pieces of information explains 3 of the identified pieces of information 	7
		<ul style="list-style-type: none"> identifies <ul style="list-style-type: none"> high in dietary fibre 3 other pieces of information explains 2 of the identified pieces of information 	6
		<ul style="list-style-type: none"> identifies <ul style="list-style-type: none"> high in dietary fibre 2 other pieces of information explains 2 of the identified pieces of information 	5
		<ul style="list-style-type: none"> identifies and explains 2 pieces of information 	4
		<ul style="list-style-type: none"> identifies 2 pieces of information and explains 1 piece of information OR identifies of 3 pieces of information 	3
		<ul style="list-style-type: none"> identifies 1 piece of information and explains 1 piece of information OR identifies 2 pieces of information 	2
		<ul style="list-style-type: none"> identifies a piece of information 	1

Question	Sample response	The response	Mark
		<ul style="list-style-type: none"> • does not satisfy any of the descriptors. 	0

Question	Sample response	The response	Mark
3	<p>a) Elderly: Elderly consumers face many concerns such as decreasing appetite, lower energy levels, reduced ability to buy and prepare foods and health concerns. Example may be ready-made, easy to prepare or require minimal preparation, in single-serve portions such as a single-serve, UHT soup, reformulated to be high protein, low sodium, high fibre and pureed would meet the needs of this NCM.</p> <p>b) Lactose-intolerant: formulations free from lactose, a disaccharide found in milk and milk products. Example may include lactose-free yoghurt such as soy yoghurt.</p> <p>c) Pregnant: Pregnant consumers require nutrition-rich, food products that are high in protein, iron and folate to support the needs of the mother and baby. Example may be a high-fibre bread product reformulated to be high in protein and fortified with folic acid and iron.</p>	<ul style="list-style-type: none"> • provides an appropriate reason for the 3 Nutrition Consumer markets (NCMs) • provides an example for each of those NCMs 	6
		<ul style="list-style-type: none"> • provides an appropriate reason for the 3 NCMs • provides an example for 2 of those NCMs 	5
		<ul style="list-style-type: none"> • provides appropriate reason for 2 NCMs • provides an example for each of those 2 NCMs 	4
		<ul style="list-style-type: none"> • states an appropriate reason for the 3 NCMs OR • provides an example for the 3 NCMs OR • states an appropriate reason for 2 NCMs • provides an example for 1 of those NCMs OR • states an appropriate reason for 1 NCM • provides 2 examples for that NCM 	3
		<ul style="list-style-type: none"> • states an appropriate reason for 2 NCMs OR • provides an example for each of those 2 NCMs OR • states an appropriate reason for 1 NCM • provides an example for 1 NCM 	2
		<ul style="list-style-type: none"> • states an appropriate reason for 1 NCM 	1

Question	Sample response	The response	Mark
		<p>OR</p> <ul style="list-style-type: none"> provides an example for 1 NCM 	
		<ul style="list-style-type: none"> does not satisfy any of the descriptors. 	0
4	<p>Baked fish with vegetables and cheese sauce</p> <ul style="list-style-type: none"> determine whether the cheese sauce may be made using wheat flour refine the cheese sauce by reformulating with a gluten-free flour. <p>Satay chicken and vegetable kebabs served with rice</p> <ul style="list-style-type: none"> determine whether the satay is made using a soy sauce that contains gluten refine formulation using gluten-free soy sauce. <p>Chili beans with tortilla chips and jacket potato</p> <ul style="list-style-type: none"> determine whether tortilla chips could contain gluten refine using corn-based tortilla chips. <p>An investigation into the food components in each choice would find the hidden gluten. A refinement would be to use gluten-free ingredients.</p>	<ul style="list-style-type: none"> provides an evaluation of all choices to expose hidden gluten identifies a refinement for each choice provides justifications for the recommendations 	8
		<ul style="list-style-type: none"> provides an evaluation of all choices to expose hidden gluten identifies a refinement for each choice provides a justification for 1 recommendation 	7
		<ul style="list-style-type: none"> provides an evaluation of all of the choices to expose hidden gluten identifies a refinement for each choice <p>OR</p> <ul style="list-style-type: none"> provides an evaluation of all of the choices to expose hidden gluten identifies a refinement for 2 of the choices provides a justification for 1 recommendation 	6
		<ul style="list-style-type: none"> provides an evaluation for all of the choices to expose hidden gluten identifies a refinement for 2 of the choices <p>OR</p> <ul style="list-style-type: none"> provides an evaluation for all of the choices to expose hidden gluten identifies a refinement for 1 choice provides a justification for 1 recommendation 	5

Question	Sample response	The response	Mark
		<ul style="list-style-type: none"> provides an evaluation for all of the choices to expose hidden gluten identifies a refinement for 1 choice <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> provides an evaluation for 2 of the choices to expose hidden gluten identifies a refinement for 1 choice provides a justification for 1 recommendation 	4
		<ul style="list-style-type: none"> explains 3 choices or refinements 	3
		<ul style="list-style-type: none"> describes 2 choices or refinements 	2
		<ul style="list-style-type: none"> makes a statement about the choices 	1
		<ul style="list-style-type: none"> does not match any of the descriptors. 	0
5	<p>Reformulation to change the fat to poly- or monounsaturated oils, e.g. sunflower or rice-bran oil (lower saturated fat) lowering or reducing the salt and salted flavourings (seasonings), and alternative processing methods such as unpeeled potatoes or spraying the potatoes and baking to better suit the nutritional needs of the CHD NCM.</p> <p>By making these modifications, the fat content, and consequently LDL cholesterol, would be decreased and the fibre content of the product would be increased. The Heart Foundation advises that choosing healthier fats such as cooking oils such as peanut or sunflower oils and high fibre diets support heart health.</p>	<ul style="list-style-type: none"> explains reformulation of food components and processing explains how reformulation supports good health 	8
		<ul style="list-style-type: none"> explains reformulation of food components and processing explains 2 ways reformulation supports good health 	7
		<ul style="list-style-type: none"> explains 4 reformulations of food components and processing explains 2 ways reformulation supports good health 	6
		<ul style="list-style-type: none"> explains 3 reformulations of food components and processing explains 2 ways reformulation supports good health 	5
		<ul style="list-style-type: none"> explains 2 reformulations of food components and processing 	4

Question	Sample response	The response	Mark
		<ul style="list-style-type: none"> explains 2 ways reformulation supports good health <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> explains reformulation of food components and processing explains 2 ways reformulation supports good health 	
		<ul style="list-style-type: none"> explains 2 reformulations of food components and processing explains 1 way reformulation supports good health 	3
		<ul style="list-style-type: none"> describes 2 reformulations <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> describes 1 reformulation and 1 way reformulation supports good health 	2
		<ul style="list-style-type: none"> describes 1 reformulation <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> describes 1 way reformulation supports good health 	1
		<ul style="list-style-type: none"> does not match any of the descriptors. 	0
6a)	Low in fibre – plain sweet biscuit High in fat – coconut yoghurt High in sugar – chocolate rice bars High in salt – microwave popcorn	<ul style="list-style-type: none"> identifies 4 correctly 	4
		<ul style="list-style-type: none"> identifies 3 correctly 	3
		<ul style="list-style-type: none"> identifies 2 correctly 	2
		<ul style="list-style-type: none"> determines 1 correctly 	1
		<ul style="list-style-type: none"> does not match any of the descriptors. 	0

Question	Sample response	The response	Mark
6b)	<p>The snack food from the list that should not be consumed is coconut yoghurt due to the high saturated fat content. Coconut yoghurt contains 13.65g saturated fat per 150ml serve. The Heart Foundation advises that consuming coconut oil (contained in the coconut milk in the yoghurt) increases your total blood cholesterol (HDL and LDL). High LDL cholesterol increases your risk of heart disease. Too much LDL cholesterol can lead to fatty deposits in the blood vessels, causing the blood vessels to become stiff, narrow. Arteries, including those that cover the surface of the heart, may become clogged and reduce blood flow.</p>	<ul style="list-style-type: none"> identifies the food to avoid provides 3 justifications 	4
		<ul style="list-style-type: none"> identifies the food to avoid provides 2 justifications 	3
		<ul style="list-style-type: none"> identifies the food to avoid provides a justification 	2
		<ul style="list-style-type: none"> makes a statement about the choices 	1
		<ul style="list-style-type: none"> does not match any of the descriptors. 	0

Extended response: Question 7

Assessable feature: Analysing and determining

Analyse the stimulus material to recognise and explain the problem including constraints

The response	Mark
• provides 3 explanations of the problem and constraints	3
• provides 2 explanations of the problem and constraints	2
• provides 1 description of the problem or a constraint	1
• does not match any of the descriptors.	0

Analyse the stimulus material to recognise and explain essential characteristics of the problem — NCMs trends

The response	Mark
• explains 4 of the essential characteristics of the NCM trends	4
• explains 3 of the essential characteristics of the NCM trends	3
• describes 2 of the essential characteristics of the NCM trends	2
• makes a statement related to the trends	1
• does not match any of the descriptors.	0

Analyse the stimulus material to recognise and explain the needs of the relevant stakeholders — a community market store and the vegetarian and vegan consumer markets

The response	Mark
<ul style="list-style-type: none"> identifies the community market store and the vegetarian and vegan markets as stakeholders explains 5 of the needs of the stakeholders 	7
<ul style="list-style-type: none"> identifies the community market store and the vegetarian and vegan markets as stakeholders explains 4 of the needs of the stakeholders 	6
<ul style="list-style-type: none"> identifies the community market store and the vegetarian and vegan markets as stakeholders explains 3 the needs of the stakeholders 	5
<ul style="list-style-type: none"> identifies the community market store and the vegetarian and vegan markets as stakeholders explains 2 of the needs of the stakeholders 	4
<ul style="list-style-type: none"> identifies the community market store and the vegetarian and vegan markets as stakeholders explains 1 of the needs of a stakeholder <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> identifies 1 of the stakeholders explains 2 of the needs of either stakeholder 	3
<ul style="list-style-type: none"> identifies the community market store and the vegetarian and vegan markets as stakeholders <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> identifies the community market store or the vegetarian and vegan markets as a stakeholder describes 1 of the needs of either stakeholder <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> describes 2 of the needs of either stakeholder 	2
<ul style="list-style-type: none"> makes a statement related to a stakeholder 	1
<ul style="list-style-type: none"> does not match any of the descriptors. 	0

Analyse the stimulus material to determine the solution requirements. Develop solution criteria for the problem.

The response	Mark
<ul style="list-style-type: none"> • outlines 4 solution requirements • develops 5 solution criteria 	9
<ul style="list-style-type: none"> • outlines 4 solution requirements • develops 4 of the solution criteria 	8
<ul style="list-style-type: none"> • outlines 4 solution requirements • develops 3 of the solution criteria 	7
<ul style="list-style-type: none"> • outlines 3 of the solution requirements • develops those 3 solution criteria <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • outlines 4 solution requirements • develops 2 of the solution criteria 	6
<ul style="list-style-type: none"> • outlines 3 of the solution requirements • develops 2 of those solution criteria <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • outlines 4 solution requirements • develops 1 of those solution criteria 	5
<ul style="list-style-type: none"> • outlines 2 of the solution requirements • develops those 2 solution criteria <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • outlines 3 of the solution requirements • develops 1 of those solution criteria 	4
<ul style="list-style-type: none"> • outlines 3 of the solution requirements <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • outlines 2 of the solution requirements • develops 1 of those solution criteria 	3

Analyse the stimulus material to determine the solution requirements. Develop solution criteria for the problem.

The response	Mark
<ul style="list-style-type: none">• describes 1 solution requirement and 1 solution criteria OR• describes 2 solution requirements OR• describes 2 solution criteria	2
<ul style="list-style-type: none">• makes a statement about solution requirements or criteria	1
<ul style="list-style-type: none">• does not match any of the descriptors.	0

Assessable feature: Evaluating

Evaluate formulations using Criterion — the needs of a vegetarian/vegan NCM		Evaluate formulations using Criterion — complements the existing range of the store	
The response	Mark	The response	Mark
<ul style="list-style-type: none"> provides an evaluation of each formulation using the criterion makes a judgment 	4	<ul style="list-style-type: none"> provides an evaluation of each formulation using the criterion makes a judgment 	4
<ul style="list-style-type: none"> provides an evaluation of each formulation using the criterion 	3	<ul style="list-style-type: none"> provides an evaluation of each of the formulations using the criterion 	3
<ul style="list-style-type: none"> provides an evaluation of 2 of the formulations using the criterion 	2	<ul style="list-style-type: none"> provides an evaluation of 2 of the formulations using the criterion 	2
<ul style="list-style-type: none"> makes a statement about the formulations 	1	<ul style="list-style-type: none"> makes a statement about the formulations 	1
<ul style="list-style-type: none"> does not match any of the descriptors. 	0	<ul style="list-style-type: none"> does not match any of the descriptors. 	0

Evaluate formulations using Criterion — reflective of identified consumer trends — trust-worthy ready-to-eat and ready-made food product and is offering consumers value for money

The response	Mark	Notes
<ul style="list-style-type: none"> provides an evaluation of each of the formulations using both of the identified consumer trends and trustworthy, ready to eat and ready-made food offering value for money makes a judgment about the formulations for each of the criteria 	8	The evaluation includes: <ul style="list-style-type: none"> Formulation 1 is trust-worthy for vegetarians and not suitable for vegans Formulation 2 is trust-worthy for both vegetarian and vegan consumers Formulation 3 would not be considered 'trust-worthy' by the targeted consumers
<ul style="list-style-type: none"> provides an evaluation of each of the formulations using both of the identified consumer trends and trustworthy, ready to eat and ready-made food offering value for money makes a judgment about the formulations for 1 of the criteria 	7	The judgment is: all three formulations would be ready-to-eat and ready-made food products.
<ul style="list-style-type: none"> provides an evaluation of each of the formulations using both of the identified consumer trends and trustworthy, ready to eat and ready-made food offering value for money 	6	The evaluation includes:
<ul style="list-style-type: none"> provides an evaluation of each of the formulations using both of the identified consumer trends stating 5 evaluations 	5	<ul style="list-style-type: none"> Formulation 1 is a snack food, priced at \$3.80 per 80g serve
<ul style="list-style-type: none"> provides an evaluation of each of the formulations using both of the identified consumer trends stating 4 evaluations 	4	<ul style="list-style-type: none"> Formulation 2 is a light meal or snack, priced at \$4.20 per 345g single serve Formulation 3 is a family-sized meal, priced at \$4.00 per 400g serve.
<ul style="list-style-type: none"> provides an evaluation of 2 of the formulations using both of the identified consumer trends stating 3 points 	3	The judgment includes:
<ul style="list-style-type: none"> describes either of the formulations using both of the identified consumer trends stating 2 points 	2	<ul style="list-style-type: none"> Formulation 3 would be considered as the best value-for-money as it provides the largest serve size per price.
<ul style="list-style-type: none"> makes a statement about the formulations 	1	
<ul style="list-style-type: none"> does not match any of the descriptors. 	0	

Evaluate formulations using Criterion — sensory evaluation

The response	Mark
<ul style="list-style-type: none">• provides an evaluation of each formulation for appearance, taste and texture• makes a judgment	4
<ul style="list-style-type: none">• provides an evaluation of each formulation for appearance, taste and texture	3
<ul style="list-style-type: none">• provides an evaluation of 2 of the formulations for 2 of appearance, taste and texture	2
<ul style="list-style-type: none">• makes a statement about formulations for appearance, taste or texture	1
<ul style="list-style-type: none">• does not match any of the descriptors.	0

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

The response	Mark
<ul style="list-style-type: none"> identifies a formulation as the best solution with refinements provides 5 justifications for the best solution describes 2 refinements 	8
<ul style="list-style-type: none"> identifies a formulation as the best solution with refinements provides 4 justifications for the best solution describes 2 refinements 	7
<ul style="list-style-type: none"> identifies a formulation as the best solution with refinements provides 3 justifications for the best solution describes 2 refinements 	6
<ul style="list-style-type: none"> identifies a formulation the best solution with refinements provides 3 justifications for the best solution describes 1 refinement 	5
<ul style="list-style-type: none"> identifies a formulation as the best solution with refinements provides 2 justifications for the best solution identifies 1 refinement 	4
<ul style="list-style-type: none"> identifies a solution with refinements describes 1 reason it is the best solution identifies 1 refinement <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> identifies 1 solution with a refinement describes 2 reasons it is the best solution 	3
<ul style="list-style-type: none"> describes 1 solution and 1 refinement <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> describes 1 solution and a reason 	2
<ul style="list-style-type: none"> makes a statement relating to the best solution 	1
<ul style="list-style-type: none"> does not match any of the descriptors. 	0