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Level 1 Home Economics, 2017

90961 Demonstrate understanding of how packaging information influences an individual's food choices and well-being

2.00 p.m. Tuesday 21 November 2017
Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of how packaging information influences an individual's food choices and well-being.	Demonstrate in-depth understanding of how packaging information influences an individual's food choices and well-being.	Demonstrate comprehensive understanding of how packaging information influences an individual's food choices and well-being.

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should attempt ALL the questions in this booklet.

Pull out Resource Booklet 90961R from the centre of this booklet.

You MUST use the resources provided in the resource booklet to answer the questions.

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–12 in the correct order and that none of these pages is blank.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

High
Merit

TOTAL | **12**

INSTRUCTIONS

Read **Resource Booklet 90961R** and the scenario below, and refer to them when answering Questions One and Two.

Tahlia's Scenario

Tahlia is a Year 11 student, and plays netball. Her brother Jake is in Year 13, and plays in a football (soccer) team, for their college.

Tahlia takes Home Economics as a subject at school and is learning about reading food labels and making nutritious food choices. Tahlia and Jake's parents both play sports and are careful with the food choices they make.

None of the family has a food allergy.

QUESTION ONE: SNACK BARS

Read the scenario below, and refer to it, as well as **Resource A** on pages 2–7 of the resource booklet, when answering this question.

Tahlia is looking at suitable snack bars for her and her sporty family to eat before games and sports practices.

She looks at the front of the packaging on each product, then reads the nutrition information on the side or back panel, and checks out the promotional and nutritional features before making a choice.

(a)   Explain how and why the nutritional and promotional features from the snack bars in the table on the following page, could influence Tahlia's food choice.

Feature	Explain how and why this feature could influence Tahlia's food choice	ASSESSOR'S USE ONLY
(i) Tasti Made Simple Wholefood Bars	The 3.5 health star rating could influence Tahlia to buy the 'Tasti bars' because they have been rated by health professionals which have given the bars a 3.5 rating. Tahlia would think that the proffessionals know what they are doing and she would trust that the bars have a 3.5 star rating. Because the bars are close to 5 stars Tahlia would think that the bars are good for you.	
(ii) Mother Earth Fruit Sticks	Tahlia could be influenced by the packaging because it states that it supports enviro schools. Tahlia may be at an environmental school or previously been. She may think that the packaging is sustainable and easy to recycle Or maybe a percentage of profit may go towards the schools. Because there is a picture of a bear, Tahlia may think that its a natural product and it may influence her to buy.	
(iii) Mother Earth Fruit Sticks	By stating that there are no artificial flavours or colours that means that no chemicals or colourings have been added to the product which means the fruit sticks have been made with all natural ingredients and no flavourings have been added. This may influence Tahlia to Purchase the product because she doesn't want to consume any artificial flavors or colours	

(b)   Tahlia has been taught in her Home Economics class to consider all of the nutrients in food products to make an informed choice. She has decided the Nice & Natural Protein Nut Bars are the better choice of snack bar.

   (i)   **Write** the amount of total fat, sugar, and fibre (per 100 g) for EACH snack bar in the chart below.

   Note: The amounts of protein have been entered for you.

   (ii)   **Underline** the ingredients that contain fat for EACH snack bar's ingredients list in the chart below.

   (iii)   **Circle** the ingredients that contribute to the sugar content for EACH snack bar's ingredients list in the chart below.

Per 100 grams	Tasti Made Simple Wholefood Bars	Nice & Natural Protein Nut Bars	Mother Earth Fruit Sticks
Protein	7.7g	25.5g	4.5g
Total fat	14.7g	34.3g	3.0g
Sugar	46.6g	6.6g	25.6g
Fibre	8.8g	12.9g	3.4g
Ingredients	Dates, roasted cashews, cocoa powder, coconut, natural coconut flavour.	Peanuts, soy protein crisps [soy protein isolate, tapioca starch, soy lecithin, salt], glucose syrup, chicory fibre, superseeds [sunflower seeds, pumpkin seeds, chia seeds], dried cranberries, dried goji berries, sunflower oil, quinoa crisps, glycerine, natural flavour, citric acid, soy lecithin, caramelised sugar syrup, stevia.	Wheat flour, raspberry filling [fruit: concentrated apple puree, raspberry puree], glucose syrup, humectant [glycerol], sugar, gelling agent [pectin], wheat fibre, firming agent [calcium lactate], natural flavour, acidity regulator [citric acid], fruit and vegetable concentrates [black carrot, blackcurrant], maltodextrin, golden syrup, invert sugar, brown sugar, sugar, desiccated coconut, [coconut, colour stabiliser: 223, (sulphites)], dietary fibre [inulin], raising agents (450, 500), butter [cream (milk), salt], sunflower oil, emulsifier (471), natural flavour, salt, wheat bran, wheatgerm, natural colour [annatto].

(c) The Nice & Natural Protein Nut Bars contain the most protein.

(i) Explain why having enough protein is important for Tahlia and her family.

Protein is important for Tahlia and her family because they are all active and need to repair damaged tissues and muscles. Because Tahlia and Jake a rapidly growing teenagers they especially need protein to help with their growth. Protein helps make new body cells. Its also needed for pregnant woman who need Protein to help the foetus grow and keep their own bodies strong aswell.

(ii) Justify HOW and WHY the Nice & Natural Protein Nut Bars are the best choice for Tahlia and her family members to eat before games and sports practice.

Consider factors such as:
- the effect of eating fat and sugar on physical well-being
- your own knowledge of the *Food and Nutrition Guidelines* (FNGs) for active teenagers.

PLANNING

fat
Sugar) Physical WB

low, SSF

34.3g
5.8 saturated

6.6g sugar

The Nice and Natural protein bars are a good choice for Tahlia and her family because they have the least amount of sugar in them compared to the other two bars. Per 100g Nice and natural have 6.6g of sugar compared to `Tasti' with 46.6g

Part (c) (ii) continues on the next page

per 100g and Mother earth with 25.6g per 100g. The FNG guidelines say that you should choose foods low in Salt, Sugar and fat in your diet. Because Tahlias family is so active they need carbohydrates to give them long lasting energy which will make them feel fuller for longer. Because Nice and natural doesn't have a lot of sugar in it that means there are more complex carbs than Simple. Per 100g Nice and natural have 21.1 g of carbs and 6.6g of sugar this means that 15.5g of carbs per 100g are Complex which is low GI meaning that it will take longer to break down and it will be a slow release of energy. In the Nice and Natural bars the fat total is the most out of the other two bars with 34.3g per 100g. 5.8g is saturated fats which means that 27.5g is unsaturated. Because the bars have a source of fat that means that there is a higher Concentration of energy. Because they are an active family that means they need a lot of complex carbohydrates that keeps them fuller for longer. The protein bars are also high in fibre which will also give them long lasting energy and reduce the likeliness to over eat. Fibre also helps to regulate bowel bowel movement and prevent constipation which will reduce risk of bowel cancer. Nice and natural bars are the best option for Tahlias family because they are lowest in sugars and highest in fibre and, protein and energy which is what Tahlias family needs for their physical wellbeing. Because they are active they need to eat foods low GI foods and foods with protein so they can grow and repair muscles, tissues and body cells.
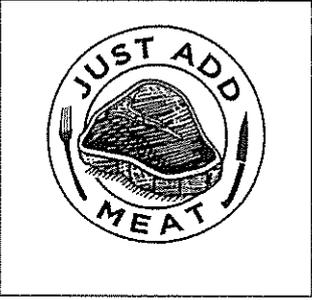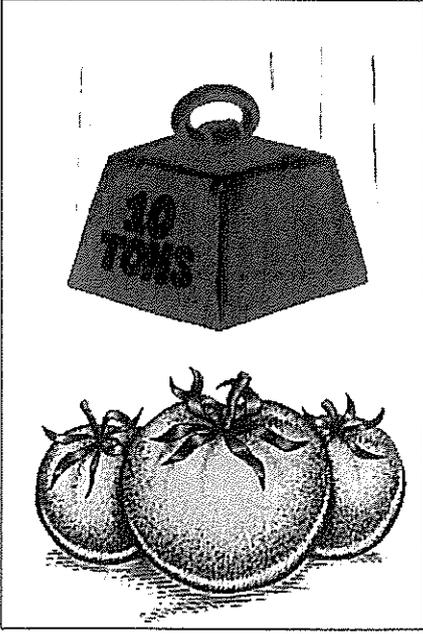
QUESTION TWO: KILLER SAUCE FOR SPAG BOL

Read the scenario below, and refer to it, as well as **Resource B** on pages 8 and 9 of the resource booklet, when answering this question.

> Tahlia, Jake, and their parents want a quick meal to cook so they can attend sports practices. Tahlia's mum has brought home "Killer Sauce for Spag Bol" for them to use. They already have dried spaghetti in the cupboard.

(a)   Explain how and why the promotional features from the Killer Sauce for Spag Bol in the table below, and on the following page, could influence their mum to buy it.

Feature	Explain how and why this promotional feature could influence Tahlia and Jake's mum to buy the Killer Sauce for Spag Bol
(i)	Because the only other ingredient you need is meat. Its practical and saves time for Tahlias family so they can go to their sports practices. It is an easy meal to make and the kids can make it for themselve instead of their mum which is easier for Tahlias mother. Also if someone doesnt like meat offree or a certain type they can choose what to add in the mix.
(ii)	This picture makes us think that the product is made up of mostly tomatoes. Because that is what the picture is portraying, Tahlias mum would think that the sauce is healthy because it is mainly tomatoes. Because there is an image of real tomatoes it makes her think that it is real tomato sauce that she is purchasing

(iii)

FEEDS 4 HUNGRY MOUTHS

This statement makes Tahlias mother think that there is a lot of sauce because it says it feeds four hungry mouths. Tahlias mum wouldn't want the family to still be hungry after dinner so this may influence her because she belives it will fill every one up.

(b) According to the *Food and Nutrition Guidelines*, the amount of meat suggested is too much for Tahlia's family's well-being.

(i) Tick the total amount of beef mince that is most appropriate for a meal intended to meet the needs of a family of four.

Amount of beef mince	Tick ✔ ONE
700 g	
500 g	✓
300 g	
200 g	

(ii) Red meat is a good source of iron.

Describe the effect of eating enough iron on Tahlia's and Jake's physical well-being.

Iron is from read meats and helps oxygen travel through your body to support energy production. Lack of iron would result in fatigue and lack of energy. Tahlia especially needs iron because of the loss of blood every month due to menstration and she needs to restore that energy. Jake and Tahlia both need iron so they can have enough energy to play their sport as best as they can.

(c) Tahlia is making the Killer Sauce for Spag Bol meal for her family. Her mum has told her to use mince and spaghetti as a base for the meal, and to choose other ingredients to complete the meal. The meal needs to have a wide range of nutrients and be quick to make.

(i) Draw and label the complete meal as an 'ideal plate model' below, indicating the portion sizes of the ingredients, as well as identifying an appropriate drink.

Drink

Water

Meal

Salad 1 cup

eg. lettuce Cucumber etc. Spinich Onion

150 grams Mince (red meat)

1 cup cook Spaghetti (preferably) wholegrain.

Part (c) (ii) continues on the next page

(ii) Justify your chosen meal by explaining the benefits of the **additional food** you have placed on the plate, and your choice of **drink**.

Consider factors such as:
- your own knowledge of the *Food and Nutrition Guidelines* (FNGs)
- preparation and cooking time
- additional nutrients and their contribution to the physical well-being of Tahlia's family.

PLANNING

Water

Portion sizes, Variety

Time/prep

VB

Minerals

Carbs

Iron/protein.

The food and Nutrition Guidelines say that you should avoid fizzy drinks and juices (drinks high in sugar). Instead you should drink water or low fat milk. I have chosen water to go with the meal. FNG say that vegetables should take up half the plate model and protein and carbs for the other two quarters. A serving size should be aproximately the size of your palm so I have decided on 150g of lean red mince, I cup of cooked wholegrain spaghetti and I cup of a mixed salad. Tahlia would need to boil the pasta, cook the mince and would/

need to take time to prepare the salad. The red mince is good because its a source of iron and protein needed for the whole family. It help repair damaged tissues and muscles and grow new body cells. Iron is needed to carry oxygen through your blood for energy production. The wholegrain spaghetti is good for a longlasting source of energy and provides complex carbs and fibre needed to feel fuller for longa and prevent st constipation. Water is needed for hydration and to regulate body functions. They could have low fat milk aswell which would provide a source of calcium which is needed for strong teeth and bones especially for Tahlia and Jake because they are growing adolcents. Lack of calcium could lead to Osteoporosis which means they would have fragile/breakable bones. A mixed salad would also be good. FNG say to consume a variety of different coloured fruits and vegetables a day. By thate having vegetables such as spinich they will be getting a source of Vitamin B which you can get from whole grain breads, cereals and also leafy greens eg spinich. Vitamin B provides a quick release of energy. All these contributes to the meal will supply Tahlias family with many nutrients that are vital for a healthy diet.//

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QUESTION PART	Extra space if required. Write the question part(s) if applicable.	ASSESSOR'S USE ONLY

Annotated Exemplar

Merit exemplar 2017

Subject:	Home Economics		Standard:	90961	Total score:	12

Q	Grade score	Annotation
1	06	The candidate consistently demonstrates in-depth knowledge when explaining how and why nutritional and promotional features influence food choice. They also demonstrate a good understanding of protein, sugar, and fat. The candidate needed to give a more in-depth answer on protein such as deficiencies, or a larger range of functions with an explanation to gain a higher grade. In their response to part (c) (ii), they were able to identify the appropriate FNG. They also correctly identified that this bar had the least amount of sugar, but they did not identify the effects of sugar on physical well-being. This candidate was able to distinguish between saturated and unsaturated fat, but again they did not explain the effects of fat on physical well-being, which they needed to do to gain Excellence.
2	06	The candidate consistently demonstrates in-depth knowledge when explaining how and why nutritional and promotional features influence food choice, however they do not demonstrate comprehensive understanding. The candidate was awarded a Merit for part (b) (ii) about iron, and needed to discuss haemoglobin, anemia (mentioned low iron symptoms, but did not name the deficiency), and the difference between haem and non-haem iron, to gain an Excellence grade. With part (c) (ii), the candidate does not focus on the additional foods added to the plate, i.e. the body of their answer should have focused on the salad and the nutrients it provided, as well as their effects on physical well-being.