Assessment Schedule - 2015

Home Economics: Demonstrate understanding of how packaging information influences an individual's food choices and well-being (90961)

Evidence

Note: Plain text denotes Achievement evidence; underlined text is for Merit; and **bold** is for **Excellence**.

Question	Expected Coverage (examples) Achievement		Achievement with Merit	Achievement with Excellence
One (a) (i)	Boys doing skateboarding and BMX tricks."Grab a Free Designer T-shirt".	Identifies one promotional feature on Kellogg's® Nutri-Grain®.		
(ii)	 Students will buy this cereal to get a free T-shirt. Boys who do BMX and skateboarding might think that this cereal will give them a lot of sustained energy for their sport. The students are going on camp and need an extra shirt. 	Describes how the feature would encourage students to buy the product.	Explains how the feature would encourage students to buy the product.	
(b) (i)	 Kids shown with medals, running and cycling. "NZ's No. 1 Breakfast Cereal". Image of Weet-Bix, fruit, and milk. 	Identifies one promotional feature on Sanitarium™ Weet-Bix™.		
(ii)	 Students will think if they eat this cereal, they will have energy for running and cycling. The fit, healthy kids doing the Weet-Bix Kids Tryathlon on the packaging will make students think that they will be fit and healthy if they eat this cereal. The medals make you think the children are 'winners'. 	Describes how the feature would encourage students to buy the product.	Explains how the feature would encourage students to buy the product.	

NCEA Level 1 Home Economics (90961) 2015 — page 2 of 12

(c)	Kellogg's Nutri-Grain 40 g (may include 1 metric cup) serving size 69 g of carbohydrates per 100 g 32 g of sugar per 100 g 2.7 g of dietary fibre per 100 g. Sanitarium Weet-Bix 30 g (may include 2 biscuits) serving size 67 g of carbohydrates per 100 g 2.8 g of sugar per 100 g 10.1 g of dietary fibre per 100 g.	Correctly answers 6 out of 8.		
(d)	No (may include both contain gluten).	Correctly answers whether either of the products would be suitable for a person with gluten intolerance.		
(e)	B vitamins help release energy. B vitamins help with energy release from other foods. They will help the students on camp by allowing them to get the most possible energy from the foods they are eating so that they can participate well in camp activities.	Identifies the function of B vitamins.	Explains how the B vitamins will benefit students on camp.	
(f)	Sanitarium™ Weet-Bix™	Chooses the cereal that would be a better choice for sustained energy for students at camp, to help them feel full for longer.		

(g)

 Sanitarium Weet-Bix has 67 g of total carbohydrates per 100 g, and only a small amount of sugar per 100 g (2.8 g), so most of its carbohydrates are complex carbs (good for sustained energy). The students need sustained energy so they can participate well in camp activities. Sugars provide some quick energy, but do not provide long-lasting energy. Sugars can also contribute to weight gain and tooth decay.

The Weet-Bix has 10.1 g of dietary fibre per 100 g, or 3.0 g per serving. Fibre provides a feeling of fullness, so will help students get through the morning without wanting to have a lot of unhealthy snacks. Fibre will also help them not get constipated at camp, so they will be happier, and more comfortable.

Both cereals have similar amounts of total carbohydrates per 100 g (67 g for Sanitarium Weet-Bix and 69 g for Kellogg's Nutri-Grain). However, Weet-Bix has a much lower level of sugars per 100 g and per serving, and is mostly made up of complex carbohydrates. Complex carbohydrates provide sustained energy to help the students participate well in camp activities, whereas too much sugar can lead to weight gain, and type 2 diabetes. The high levels of sugar in Nutri-Grain will give students a quick energy release at the beginning of the morning, but will wear off more quickly. The students may then want to snack more often.

The Weet-Bix has more than three times as much dietary fibre per 100 g and per serving, as the Nutri-Grain. The fibre will help students to feel full for longer, keep their bowels regular, and help them to absorb other nutrients in their food.

Describes how the amount of kilojoules, carbohydrates, sugars, and dietary fibre in the cereal could influence students to choose this as the better option for sustained energy.

Describes the impact on physical well-being of carbohydrates, sugars, and dietary fibre.

Explains how the amount of kilojoules, carbohydrates, sugars, and dietary fibre in the cereal could influence the students to choose this product as the better option for sustained energy.

Explains the impact on physical well-being of carbohydrates, sugars, and dietary fibre.

Justifies their choice of product by comparing it to the other cereal product.

Justification considers factors such as:

- the amount of kilojoules, carbohydrates, sugars, and dietary fibre on the different cereal packaging
- the effects on physical well-being of carbohydrates, sugars, and dietary fibre
- knowledge of the Food and Nutritional Guidelines (FNGs)
- other relevant nutritional and packaging information, including the ingredients in each product, and the suitability for students on camp.

(Answers may touch on other dimensions of well-being).

Two				
(a) (i)	(1) "Wattie's® ESTD. 1934" tells the students it is a New Zealand company that has been around a long time.(2) "Full of BEANZ" makes you think you will have lots of energy from eating these baked beans.(3) The image of the beans on toast.	Describes TWO promotional features on Wattie's® Full of BEANZ™.		
(ii)	 Students will be attracted by the well-known New Zealand brand Wattie's. The company being around since 1934 will give students confidence in this product. They also know it is made in New Zealand, and its labels will be true to New Zealand regulations. "Full of BEANZ" is quite catchy, and will make 		Explains how these features would encourage the students to purchase this product.	
	students think that the baked beans are a good energy food for camp. It is a clever play on words, with the "BEANZ" spelling, because this reinforces that this is a New Zealand-made product that is good for you.			
(b) (i)	(1) "Naturally high in protein" helps students to know they will get a lot of protein from the baked beans.	Describes TWO nutritional features on Wattie's® Full of BEANZ™.		
	(2) "Naturally low in fat" helps students to know they are choosing a low-fat food.			
(ii)	The Home Economics students know that growing children need plenty of protein in their diet, and the baked beans contain 10.9 g of protein per serving. The students know that the baked beans will provide part of a balanced plate for the kids on camp, and keep them full for longer.		Explains how these features would encourage students to buy the product.	
	The Home Economics students know that "low in fat" is a good choice for at least some of the foods on camp. The baked beans will provide lots of nutrients, and will not contribute too much to weight gain.			

NCEA Level 1 Home Economics (90961) 2015 — page 5 of 12

(c) (i)	Navy Beans OR Navy Beans (51%).	Identifies the largest ingredient in Wattie's® Full of BEANZ™.		
(ii)	Food Acid (Citric Acid) OR: Food Acid OR: Citric Acid.	Identifies the smallest ingredient in Wattie's® Full of BEANZ™.		
(d)	10.9 g	Correctly answers how many grams of protein per serving.		
(e) (i)	22 %	Correctly answers %RDI of iron in Wattie's® Full of BEANZ™.		
(ii)	Recommended Dietary / Daily Intake	Correctly answers what RDI stands for.		
(f) (i)	Glycaemic Index	Correctly answers what GI stands for.		
(ii)	Foods that are low GI release energy slowly into the bloodstream, so they will provide long-lasting energy and help maintain steady blood sugar levels.		Explains why it is good to have foods that are low GI.	

(g)

- A serving of baked beans provides a good source of energy with 895 kJ. This is important for the active students on camp. With 10.9 g of protein per serving, the beans provide about one quarter of the protein needed by the students on camp. This is important to help them grow, and to repair tissues and muscles they might hurt on camp. One serving of the beans provides 22 % RDI of iron. Iron is important because it helps produce haemoglobin in red blood cells, which carry oxygen around the body. This will help students stay alert and happy on camp, and provide plenty of oxygen for their muscles to do all the activities on camp.
- A serving of baked beans provides a good source of energy, with 895 kJ. This is important for the active students on camp. The baked beans belong to the "meats and alternatives" food group, and students need at least one serving a day from this food group. The beans are a very good source of protein, which is important for growing students, and the beans will also help to repair muscles and tissues that they might injure on camp. A serving of beans provides 10.9 g of protein, which is about a quarter of the daily needs for an 11- to 12-year-old student.

The nutrition information panel says that one serving of the beans provides 22 % of RDI for iron, but this may be for an adult, so the beans may supply an even higher percentage of daily iron needs for students on camp. Iron is important to help form haemoglobin in red blood cells, where oxygen is transported to all parts of the body. An iron-rich diet will help students feel energetic and happy on camp, and more able to think clearly. The label also says that the tin of beans provides two servings of vegetables because they

Describes why the amount of kilojoules, protein, and iron (including %RDI) in the baked beans made it a good nutritional choice.

Describes the impact on physical well-being of protein and iron.

Explains why the amount of kilojoules, protein, and iron (including %RDI) in the baked beans made it a good nutritional choice.

Explains the impact on physical well-being of protein and iron.

Justifies why Wattie's® Full of BEANZ™ was a good nutritional choice.

Justification considers factors such as:

- the amount of kilojoules, protein, and iron (including %RDI) in the baked beans
- the effects on physical well-being of protein and iron (including %RDI)
- knowledge of the FNGs
- other relevant nutritional and packaging information, including the ingredients in each product, and the suitability for students on camp.

(Answers may touch on other dimensions of well-being, or include some limitations of baked beans, e.g. high sugar level).

	contain navy beans and tomatoes. Students of this age need at least three servings of vegetables a day. The baked beans are also a good source of dietary fibre, which students need to prevent constipation on camp. The beans are also low in fat with only 1.3 g of total fats per serve, so while they provide plenty of energy and protein, they will not contribute to weight gain.		
(t	Chooses at least TWO other foods and a drink that could be served with the baked beans to reflect the 'healthy plate model' and to follow the FNGs (i.e. includes all food groups in generally correct proportions), e.g.:	Chooses foods and a drink to make up a lunch that reflects the 'healthy plate model'.	
	Baked beans with grated cheese		
	Wholegrain toast		
	Banana		
	Glass of milk.		
	Students may also use baked beans as the vegetable component of the meal, and choose another protein food, e.g.:		
	Baked beans		
	Low-fat sausages		
	Wholegrain toast		
	Fruit juice.		

NCEA Level 1 Home Economics (90961) 2015 — page 8 of 12

Three (a) (i)	Taste of India	Correctly identifies the easiest product to transport to camp.		
(ii)	The soft packaging means it will be lighter to transport than the glass jar of the other product, and it is less likely to get broken. It will also take up less space when packing for camp. Note: A reference to transportation or the camp is required, but may be implied for an Achievement answer.		Explains why the packaging is more suitable for transport.	
(b)	Sodium adds flavour and is a preservative.	Describes why sodium is incorporated in the sauces.		
(c)	 Taste of India 4 servings in each packet Store in refrigerator and use within 7 days 9/2016. Indian Tonight 4 servings in each packet Store in refrigerator for up to 3 days, or freeze in a suitable container 03/03/2017. 	Correctly answers 4 out of 6.		

NCEA Level 1 Home Economics (90961) 2015 — page 9 of 12

(d) (i)	No (may include both contain nuts).	Correctly answers whether either of the products would be suitable for a person with a nut allergy.	
(ii)	 Skin reactions, such as hives, redness, or swelling. Itching or tingling in or around the mouth and throat. Digestive problems, such as diarrhoea, stomach cramps, nausea, or vomiting. Tightening of the throat. Shortness of breath or wheezing. Runny nose. Constriction of airways. Swelling of the throat that makes it difficult to breathe. A severe drop in blood pressure (shock). Rapid pulse. Dizziness, light-headedness, or loss of consciousness. 	Describes the physical reaction of a person with a nut allergy after eating nuts.	
(e)	Indian Tonight Note: If the candidate chooses Taste of India as the 'healthiest' option, it could be justified in terms of the students doing lots of exercise, and needing extra fat for energy on the camp, it containing more natural ingredients, its suitability for transporting there, etc.	Chooses the simmer sauce that would be the healthiest option for students on the camp.	

(f)

The Indian Tonight sauce is the healthiest option because it contains much lower levels of kiloioules. total fats, and saturated fats, than the Taste of India sauce. It has a slightly higher amount of sodium per serve, compared to the Taste of India sauce, but it is not significantly higher. The Home Economics students know that too many kiloioules can add to weight gain, and the Taste of India sauce has 920 kJ per serve, compared to 574 kJ per serve for the Indian Tonight. The total fats in the Taste of India sauce contribute to the high kiloioules, and can contribute to weight gain. Saturated fats can have the long-term effect of contributing to cholesterol build-up, hardening of arteries, and high blood pressure. The Indian Tonight has 35 % tomato puree and 4 % reconstituted onions in its ingredients list, while the Taste of India has 20 % onions, and 5 % tomatoes. The Indian Tonight has more vegetables in its sauce. Both sauces have reasonably high levels of sodium to help preserve the sauce and add flavour. Sodium helps to retain fluids in the body, so could be helpful when students are doing lots of exercise. Too much sodium can have the long-tern effect of raising blood pressure.

The Home Economics students would pick the Indian Tonight sauce based on kilojoules, saturated fats, and total fats, per serving. Indian Tonight has 574 kJ per serve, compared to 920 kJ per serve, so will provide energy, but will not contribute as much to weight gain. Indian Tonight has 9.9 g of total fat per serve, compared to 21.4 g per serve for the Taste of India sauce, so will be a lower-fat choice, helping students to maintain a healthy body weight. The Indian Tonight has 2.2 g of saturated fat per serve, compared to 14.3 g per serve for Taste of India, so is a healthier option from this perspective. Saturated fats contribute in the long-term to cholesterol build-up, hardening of arteries, and cardiovascular

Describes how the levels of kilojoules, total fats, saturated fats, and sodium in the simmer sauce could influence the students to choose this product as the healthiest option for camp.

Describes the impact on physical well-being of fats, saturated fats, and sodium.

Explains how the levels of kilojoules, total fats, saturated fats, and sodium in the simmer sauce could influence the students to choose this product as the healthiest option for camp.

Explains the impact on physical well-being of fats, saturated fats, and sodium.

Justifies their choice of product by comparing it to the other simmer sauce product.

Justification considers factors such as:

- the amount of kilojoules, protein, total fats, saturated fats, and calcium on the different simmer sauce packaging
- the effects on physical well-being of fats, saturated fats, and sodium
- knowledge of the FNGs
- other relevant nutritional and packaging information, including the ingredients in each product, and the suitability for students on camp.

(Answers may touch on other dimensions of well-being).

	, , ,	
disease, so it is best to keep them to a minimum. Both products have a similar level of sodium per 100 g serve. Indian Tonight is a little higher (485 mg per serve compared to 393 mg per serve). Sodium will help students on camp to retain fluids and prevent dehydration while they are very active. In the long-term, sodium can increase the risk of high blood pressure, heart problems, and stroke, as well as osteoporosis. Students need between 900 and 2 300 mg of sodium per day, so depending on their needs, a serving of Indian Tonight could provide half or less of the daily		
•		
· · · · · · · · · · · · · · · · · · ·		
•		
requirement. Indian Tonight has more		
vegetable-based ingredients, such as tomato		
puree (35 %), and onions (4 %), compared to		
Taste of India, and it has fresh cream as 3 % of		
its ingredients, compared to 20 % for Taste of		
India.		
Note: If the candidate chooses Taste of India as		
the 'healthiest' option, it could be justified in terms		
of it containing more natural ingredients (no		
reconstituted ingredients, colours, thickeners, etc),		
and in terms of those students doing a lot of		
physical exercise on camp that could use the extra		
kilojoules and fat as an energy source. Also, the		
packaging would make it safer to transport to		
camp.		

NCEA Level 1 Home Economics (90961) 2015 — page 12 of 12

N1	N2	А3	A4	M5	М6	E7	E8
Some Achievement level questions attempted. Some relevant material.	Some parts at Achievement level. Some correct answers (less than for A3).	MOST parts at Achievement level. (Q1 – 5 of 7). (Q2 – 6 of 8). (Q3 – 4 of 6).	ALL parts at Achievement level.	ONE part at Merit level (in-depth answers).	TWO parts at Merit level (in-depth answers).	ONE part at Excellence level AND ONE part at Merit level (comprehensive answers).	ONE part at Excellence level AND TWO parts at Merit level (comprehensive answers).

N0 = No response; no relevant evidence.

Cut Scores

	Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
Score range	0 – 8	9 – 12	13 – 18	19 – 24