

Assessment Schedule – 2016

Home Economics: Evaluate conflicting nutritional information relevant to well-being in New Zealand society (91470)

Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<p><u>Evaluate</u> involves:</p> <ul style="list-style-type: none"> • analysing the conflicting nutritional information • drawing conclusions that relate the nutritional information to well-being. 	<p><u>Evaluate, in depth,</u> involves:</p> <ul style="list-style-type: none"> • analysing the underlying intent of the conflicting nutritional information • drawing conclusions about the credibility of the nutritional information sources. 	<p><u>Evaluate comprehensively</u> involves:</p> <ul style="list-style-type: none"> • critically analysing the conflicting nutritional information • drawing justified conclusions about the credibility of the nutritional information.

Evidence

*Note: For sample answer material, see **Appendix**.*

Questions Parts (a), (b), and (c)							
N1	N2	A3	A4	M5	M6	E7	E8
Little evidence of discrimination between valid / invalid information.	Demonstrates some understanding, but does not analyse (no nutritional knowledge of their own provided).	Analyses enough information / evidence to draw an appropriate conclusion relating to well-being (some nutritional knowledge of their own provided).	Analyses most of the information to draw an appropriate conclusion relating to well-being.	Analyses and evaluates, in depth, some intentions / motivation of the information presented. A conclusion regarding the credibility of the information is drawn (at least one tool is used).	Analyses and evaluates, in depth, a broad range of intentions / motivations of the information presented. Conclusions regarding the credibility of all of the information are drawn (several tools are used).	Justifies their position about the dietary advice and challenges at least ONE inherent assumption.	Fully justifies their position about the dietary advice and challenges at least TWO inherent assumptions.

N0 = No response; no relevant evidence.

Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 2	3 – 4	5 – 6	7 – 8

Appendix – Question Parts (a), (b), and (c): sample answer material (partial answer only)**(a) Analyse the possible impacts on the well-being of New Zealand society, of the conflicting nutritional information presented in the resources.**

Fibre is important to our own personal health and New Zealanders' health in general. **Resource A** gives us an accurate picture of how fibre can do this. It states that fibre is needed for bowel health (lowering the risk of bowel cancer, which is the one of the most prevalent cancers, and costs taxpayers much to diagnose and treat).

Resource A also describes how fibre can help with other chronic diseases such as heart disease and type 2 diabetes. With early death from such diseases, grandparents, and in some cases parents, are not around to help bring up children, which is a great social loss to society. The information shared in this article from a magazine that is widely read in New Zealand could potentially provide a positive impact on New Zealand society, as it quite clearly states the importance of fibre in the diet, and gives helpful guidelines (if more of the article was included).

Resource B explains that juice is not a good alternative to eating a piece of fruit, as the fibre, which is needed for satiety, is taken from the fruit. Many people will drink juice instead of eating a piece of fruit, thereby increasing the sugar content in their diet, when eating four apples probably would not occur in one sitting. Juicing is popular, but it comes with high kilojoules, and can contribute to obesity and type 2 diabetes – all huge issues in New Zealand society today.

Resource C is from a popular American magazine that is widely read throughout the world. It states that Americans do not eat enough fibre, compared to the recommended amount stated in Resource A. New Zealanders' eating patterns are similar to those of Americans', so this article can be used as relevant to New Zealand society as well. It is a scientific article and goes further than Resource A because it states fibre can improve the composition of a person's gut bacteria, and adds autoimmune diseases not mentioned in Resource A, which shows more research is being carried out.

Resource D is from *Consumer Magazine* and is stating facts about the Nutribullet, which is a popular trend at present. Nutribullets are expensive to purchase – and how much fruit could be purchased for this price? This piece of equipment is way beyond the financial means of most New Zealand families, and yet it is pushed as the “must have” appliance for our health, on television and magazines. This could affect New Zealand families who think it is vital to purchase this, and then have little money left over for the actual “healthy” fruit to put into it. People who use this appliance may not clean it correctly, which could result in bacteria growing inside, which could cause food poisoning, and could affect New Zealand society with “sick days” and decreased productivity. Also, people are eating too many fruits and vegetables at once (more than 5+ a day in one meal), which the body cannot deal with all at once in liquid form. This could increase diarrhoea because of the increase of fibre all at once, with nutrients not absorbed as well by the body. Juice is high in kilojoules and could contribute to obesity and type 2 diabetes, which are both issues for New Zealand Society.

Resource E is demonising food, and encouraging food avoidance, which means eliminating foods that provide many nutrients – not just carbohydrates – the body's preferred energy source. Art Green is promoting a paleo diet and states that foods with a high fibre content are “bad” for you. New Zealanders require this food group for their diet, and it is recommend in the *Food and Nutrition Guidelines* (FNGs) that we eat 5+ a day of this food group.

Resource F is promoting a very expensive and unnecessary fibre supplement. New Zealanders may use this product, which is bought from a health food shop. New Zealanders may buy these instead of eating cheaper fruit and vegetables, which provide a balanced range of nutrients. They may believe that they can supplement a “rubbish diet” and use them as an “insurance policy” to keep themselves healthy, without making the effort to change their own eating patterns and lifestyle.

(b) Analyse the underlying intentions of the different information relating to fibre presented in the resources, drawing conclusions about the credibility of the information, and of those presenting it.

Resource A comes from the *New Zealand Healthy Food Guide* Magazine. Rose Carr, a registered nutritionist, has written the article. She has an MSc (Hons), which is a recognised qualification in New Zealand. She will not give poor advice, as it will reflect on her professionally, and also on the high standing that the magazine has in New Zealand. The intention is to inform the public and provide credible advice and information. The *New Zealand Healthy Food Guide* has nothing to gain from this unbiased information.

Resource B is from “*That Sugar Book*” by Damon Gameau, who also wrote “*That Sugar Film*”. Damon wanted to get his message that we need to reduce sugar in our diet out to the public, after his own personal experiences with sugar. He used nutritional help and medical experts in the movie and the book to give sound and valuable information. The message he is trying to get across with the simple diagram in Resource B is that when we juice fruit, we miss out on the fibre that fills us up, and we end up with an increase of sugar in our bodies. When would you normally eat four apples at once, but we easily drink a cup of fibreless juice that four apples produce?

Resource C is from *Time* Magazine, which is a reputable and credible source, and the intention of this magazine is to inform the readers and subscribers of this magazine. This article alone will not sell the magazine. The article refers to medical professionals from Stanford University and the New York School of Medicine (highly regarded tertiary institutes), as well as a study from the *British Medical Journal*. It also quotes researchers who have looked at our ancestors’ plant-rich diet.

Resource D is a credible New Zealand Magazine that states the facts, outlining the advantages and disadvantages of products to the consumer, after they have tested the products in their own kitchen environments. It is unbiased, and the magazine has nothing to gain from the information shared – it is just informative. The manufacturers of the products tested would not know that they were being tested. If you subscribe to the magazine online or receive a paper copy, you can make informed decisions when purchasing products. However, the range of costs of the products is given, and one has to think of how many “fresh” fruit and vegetables could be purchased for the same amount as the higher priced items, and in the case of the juicer, the amount of fibre that is being thrown away and not eaten.

Art Green was “the Bachelor” in 2015. He has written the book shown in **Resource E** for his own personal gain, and it is profit driven. He may have nutrition qualifications, but he is not a credible source. The paleo diet removes and demonises carbohydrates, which is not good advice. He is not differentiating between wholegrain and processed / refined carbohydrates.

Resource F, the Lifestream pamphlet showing the Wheatgrass Green Goodness product, is profit-driven. If you read the information, you may be persuaded by it, and the seller of the health food product, to try the product to benefit your health. The information given seems convincing, but the cost of this product (unless you have been recommended by a medical practitioner to take it) is unnecessary. Fruit and vegetables would be a much better way to spend your money.

(c) Evaluate the various positions taken in relation to fibre and well-being in New Zealand in the resources.

Draw a conclusion using reasoned arguments from your own nutritional knowledge and understanding.

Resources A and C inform us that fibre from fruit and vegetables, as well as wholegrains, are good for our health, and important in preventing chronic diseases.

Resource B reminds us that juicing is not recommended, as it is better to eat the piece of fruit whole, and not remove the valuable fibre (so important for gut health and to keep blood sugar steady). It also reminds us how easy it is to consume fruit sugar.

Resource C reminds us that the Nutribullet is a very expensive piece of kitchen equipment and is potentially a breeding ground for bacteria.

The paleo diet referred to in **Resource E** is not all bad, but it is not good practice to remove an entire food group from our diet, especially one that can be an excellent source of fibre if it is wholegrain. The diet is not recommended by most dieticians and medical practitioners either.

Resource F shows an advertising supplement, which is expensive, and you can buy many fruit and vegetables for the cost of the supplement. Nutrients need to come from food, not supplements. The fruit and vegetables also give a balance of phytochemicals and colours, which protect us against ill health. It is recommended that we have 5+ a day, and not “pop a pill” to get the fibre we require.

Overall, eating food with others and not “popping pills”, is better for our overall well-being. So too is following the *New Zealand Food and Nutrition Guidelines*, which recommend 6 servings a day of bread and cereals, and 5+ servings a day of fruit and vegetables. Highly-processed foods and juice (food with the fibre removed) will not provide the valuable fibre required by the body for its everyday functioning, particularly bowel health.