

Achievement Standard 90960

Demonstrate understanding of how an individual, the family and society enhance each other's well-being

HOME ECONOMICS

1.5

Externally assessed 4 credits



Scenarios

The resource sheet for the exam gives short 'stories' called **scenarios** that describe particular people and situations. To achieve 'Excellence' you answer, in detail, all the questions relating to the given scenarios. You must describe clearly how the situation in each scenario could enhance (or not enhance) well-being and provide reasoned answers that show insight into the various influences on well-being. You need to show a comprehensive understanding of the **interrelationship** of factors, supported by reasons and justifications for your choice of potential outcomes, to excel at this level.

Definitions

The correct use of words is very important for this Achievement Standard.

You should learn the meanings of the following words and know how to use the words correctly in sentences to show you understand their meaning. Some of the words do not carry the same meaning for Home Economics as they do in everyday life.

well-being	The state of being comfortable, healthy and content – must always include all four aspects: physical, emotional, social and spiritual
hauora	Term that describes how the four aspects of well-being are interrelated
dimensions	Each of the four aspects of well-being is a 'dimension'
interrelationships	How the four aspects of well-being affect each other
family / whānau	Any group of people living together and supporting one another
aspects	An 'aspect' is a part or a feature of something ('dimensions' are also called 'aspects')
spiritual	A person's values, self-awareness and sense of purpose, self-esteem
emotional / mental	Thoughts, feelings and responses to others
physical	Anything to do with the body and its care
social	Anything to do with other people
dependence	The reliance of one person or group on another person or group
environment	People's immediate surroundings and their influence
determinants	Factors that have an important influence (on health)
social justice	Ideas about fairness in society
sustainability	Responsible management of resources so they remain available
health promotion	Helping people control their own health and well-being

The following further explains these important words.

Well-being

Existing in a state of well-being is seen as important for everyone. For a person (an **individual**) to be comfortable, healthy and content, the four aspects of well-being (physical, emotional, social and spiritual) must be satisfactory. Because each aspect has an effect on all the others, a positive (or negative) **influence** on any aspect affects a person's total well-being. In addition, each person's state of well-being affects that of other people, and, eventually, of society as a whole. Well-being can be **enhanced** (improved) by actions that have a **positive impact**. Well-being can change.

Example

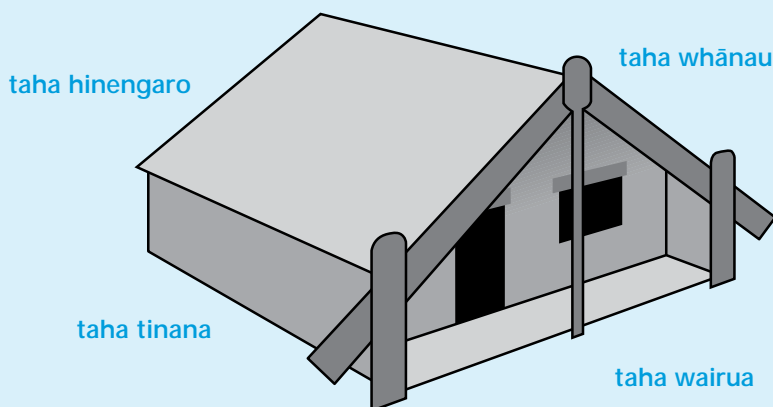
Sam, who is overweight, has been inspired by a friend to play tennis with him. How might this affect Sam's overall well-being?

Getting more exercise should, over time, have a positive effect on Sam's overall well-being because it will make Sam less likely to suffer from Type 2 diabetes or cardiovascular problems in the future (physical aspect); he will enjoy his friend's company and appreciate the challenge of improving his game (emotional aspect); he will spend time communicating with his friend and possibly other people before, during and after tennis (social aspect) and he will have increased self-esteem (spiritual aspect) from feeling good about himself.

Note: You need to provide more detail than this about each aspect in an exam answer.

Dimensions of hauora

The four **dimensions** of **hauora** are effectively the same as the four aspects of well-being. The dimensions are taha tinana (physical), taha hinengaro (mental and emotional), taha whānau (social), and taha wairua (spiritual). The whare tapa whā model compares hauora to the four walls of a house – all four walls are needed for the house to stand firmly.



Unlike well-being, hauora (which is an 'idea' or a 'concept', not a state of being) does not change.

Interrelationships

This refers to the connections between the four dimensions of hauora. When one dimension is unsatisfactory, all the others are affected.

Guided practice questions

Resource

Lisa, nutritionist and role model

Nutritionist and personal trainer Lisa Challinor, who has represented her town and country with distinction in a number of beauty pageants, is providing free nutrition classes from a health centre in a city shopping mall.

Lisa's aim is to promote healthy eating by young women in particular, so they can feel and look their best and give optimal performances at school or at work.

With her background in nutrition and her training in sports science, in addition to her success in beauty pageants, Lisa is well placed to be a positive role model for girls and young women.



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On her Facebook page, which she updates each day, Lisa gives details of her own journey to becoming healthy and fit, and posts information to promote healthy eating locally and throughout New Zealand. Readers are encouraged to ask questions and provide comments, so the page is interactive.

Lisa's is just one of several not-for-profit projects from the city centre, all working together to support a happy, healthy community.

"I know from experience that many benefits come from a healthy diet," Lisa says. "The benefits flow through from the individual to her family and eventually to society as a whole."

1. Enhancing the well-being of girls and young women

Refer to the Resource above when answering this question.

- a. Describe how Lisa Challinor, through free nutrition classes and her Facebook page, is improving the well-being of young women. Consider the positive impact on all four dimensions of well-being.

Physical

(Write a paragraph about how Lisa's input might affect anything to do with the **bodily health and fitness** of young women who go to her classes or read and contribute to her Facebook page. Include as many of the following important words and phrases as you can.)

bones and teeth	energy levels	full life	healthy food
lifestyle diseases (e.g. Type 2 diabetes)	nutrition	skin and hair	weight

Mental and emotional

(Write a paragraph about how Lisa's input might affect anything to do with the **thoughts and feelings** of young women who go to her classes and/or read and contribute to her Facebook page. Include as many of the following important words and phrases as you can.)

advice	challenge	positive	enjoy
feel good about	motivated	stress	support

Social

(Write a paragraph about how Lisa's input might affect anything to do with the **relationships with others** of young women who go to her classes or read and contribute to her Facebook page. Include as many of the following important words and phrases as you can.)

colleagues	community	company	families
friends	network	teachers	social life

Spiritual

(Write a paragraph about how Lisa's input might affect anything to do with the **values and self-esteem** of young women who go to her classes or read and contribute to her Facebook page. Include as many of the following important words and phrases as you can.)

beliefs	belonging	group	improved
member	self-esteem	sharing	values

Achievement Standard 90961

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

HOME ECONOMICS

1.6

Externally assessed 4 credits



Nutrients

Important nutrients

In the correct amounts, nutrients in food contribute to a person's overall well-being.

Nutrient	Found in	Positive effects on physical well-being	Eating too much or too little?
Protein	Meat, eggs, fish, beans	Growth of new cells and the maintenance and repair of cells, e.g. muscle cells	Weight gain
Carbohydrates (complex)	Breads, cereals, pasta, potato, kumara, taro, banana	Long-lasting energy Supply fibre especially if fresh fruit or vegetables or wholegrain cereals	Weight gain
Sugars (simple carbohydrates)	Sugar, honey, sweets	Quick release of energy	Tiredness and irritability; weight gain, diabetes
Fats (saturated)	Meat, cream, butter, eggs, sour cream, cream cheese	Concentrated energy source Source of vitamin A	Weight gain, build-up of fatty deposits in blood vessels brings increased risk of heart disease
Fats (unsaturated)	Monounsaturated fats in olive oil, avocados	Protect against heart disease	
	Polyunsaturated fats in nuts, seeds, fish	Provide essential fatty acids – e.g. omega-3 assists brain function	
Vitamins	B vitamins (thiamin, riboflavin, folic acid) in wholegrain breads and cereals, leafy green vegetables	Help release energy from food, formation of red blood cells	Mostly excreted without harming the body
	Vitamin C in citrus fruits	Helps non-haem iron absorption	Excess excreted
	Vitamin D in oily fish, liver, and made in body when skin exposed to sunlight	Helps calcium absorption	

Minerals	Calcium in milk, cheese, butter, canned salmon, sardines	Growth and maintenance of bones and teeth; helps prevent osteoporosis	
	Iron in beef, lamb, liver, nuts	Part of haemoglobin in red blood cells (carries oxygen for energy production)	
	Iodine in iodised salt, fish, seafood	Makes thyroid hormone which regulates body functions	
	Sodium in processed and salty foods – e.g. soy sauce, cheese, pizza, bacon	A little is necessary for nerve and muscle functioning	High blood pressure, risk of stroke and heart disease – teenagers need no more than 800 mg a day

Fibre is not a nutrient but it helps people feel ‘full’ and lessens the desire to overeat. Fibre helps to remove the waste products of digestion and to prevent bowel cancer.

Food and nutrition guidelines

The Ministry of Health’s New Zealand Food and Nutrition Guideline Statements (FNG) for teenagers are the following.

1. Eat a variety of foods from each of the four major food groups each day:
 - **vegetables** and **fruits** (of different colours) – 2 serves of fruit, 3 of vegetables
 - **breads** and **cereals** (wholegrain) – 6 serves
 - **milk** and **milk products** or alternatives (low in saturated fat) – 3 serves
 - **lean meat** and/or **meat alternatives** (fish, eggs, nuts, seeds) – 2 serves.
2. Eat enough in regular meals and snacks for activity, growth, and a healthy body size.
3. To help prevent later cardiovascular problems, choose foods and drinks that are:
 - low in fat, especially saturated fat
 - low in sugar, especially added sugar
 - low in salt.
4. Drink plenty of water (six to eight glasses a day) or low-fat milk.
5. Alcohol is not recommended.
6. Eat meals with family as often as possible.
7. Purchase, prepare, cook and store food in ways to help ensure food safety.
8. Be physically active in as many ways as possible for 60 minutes or more each day.

Guided practice questions

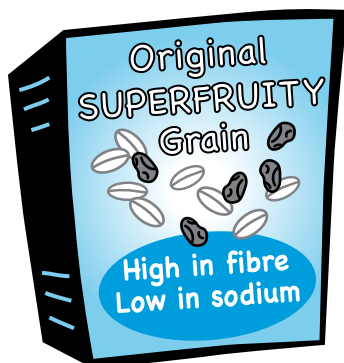
Resource

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Gemma's scenario

Gemma is a Year 11 student studying Home Economics at a large secondary school. She lives with her 12-year-old brother, Hone, and their father, Dan, who is a cleaner for a group of motels. All are keen on sport. Gemma is in the school netball team and the three enjoy riding bike trails together. Dan is always busy, so Gemma helps out by doing the supermarket shopping on Saturdays and cooking dinner every Tuesday, when Dan gets home late because he attends the weekly meeting of the local cycle group.

1. Breakfast cereals



	Per serve	Per 100 g
Energy kJ	829	1 660
Protein g	4.3	8.6
Fat, total g	5.5	11.1
Saturated fat g	1.0	2.0
Carbohydrate, total g	31.6	63.1
Sugars g	12.5	24.9
Dietary fibre g	4.2	8.4
Sodium mg	46	95
Iron mg	2.2 (18%)*	4.3 (35%)
*Percentage of Recommended Dietary Intake (RDI)		
Serving size: 50 g		

	Per serve	Per 100 g
Energy kJ	470	1 570
Protein g	5.9	19.7
Fat, total g	0.1	0.4
Saturated fat g	<0.1	0.1
Carbohydrate, total g	21.2	70.8
Sugars g	4.4	14.5
Dietary fibre g	0.8	2.5
Sodium mg	147	490
Iron mg	3 (25%)*	10 (82%)
*Percentage of Recommended Dietary Intake (RDI)		
Serving size: 3/4 cup		

Refer to Gemma's scenario and the **Resource** above when answering this question.

Gemma needs to choose a nutritious breakfast cereal for the family. Two cereals seem to be good value for money: 'Original Superfruity Grain' and 'Simply Crunch'. Gemma looks at the front of the packaging on each and then reads the nutrition information panel before choosing.

(Compare the two NIPs to find the answers for **a.**; look at 'sodium' to find the 'salt' answer.)

a. i. The breakfast cereal with the most sugar per 100 g is:

ii. The breakfast cereal with the most salt per 100 g is:

iii. The breakfast cereal with the most fibre per 100 g is:

- b. Identify **one** promotional feature on the packaging of 'Simply Crunch' and explain how this feature might influence Gemma to buy that cereal.

(Promotional features are 'advertising' features, usually in large print or as illustrations. The promotional features on the 'Simply Crunch' packet are the name of the cereal, the illustration, 'Low GI', 'NZ Made' and '99% fat free'.)

Promotional feature: _____

Influence: _____

- c. 'Original Superfruity Grain' is the most suitable cereal for Gemma to buy. Describe how the amounts of salt, fibre and sugar in the two cereals help to make 'Original Superfruity Grain' the healthier choice.

(Use your answers to a. to help with this answer. It can also be helpful to draw a table so you can quickly see the food items with the amounts of just the nutrients that are mentioned in the question, as follows.)

(Per 100 g)	Original Superfruity Grain	Simply Crunch
Salt	95 mg	490 mg
Fibre	8.4 g	2.5 g
Sugar	24.9 g	14.5 g

Describe the unhealthy effects of too much salt and the healthy effect of fibre in people's diets long term. Consider where the sugar in the cereal probably comes from and the healthy effects of fruit.)



Questions NCEA Questions

Question One

Nutritional information in the Resources is as stated in the NCEA paper, 2013.

Year 2013
Ans. p. 71

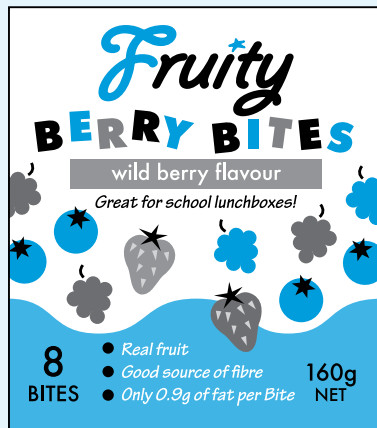
Resource A: Fruit-based snacks

Yummy Macapricot Bars



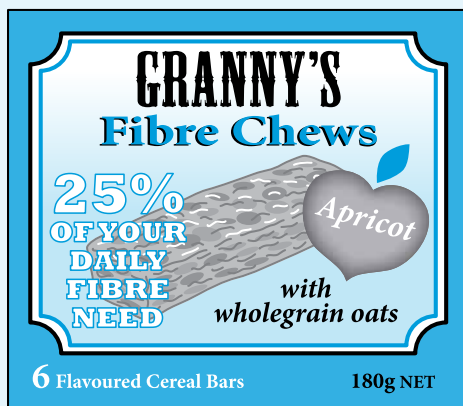
Nutrient	Nutrition per 100 g (serve size 25 g)
Energy	2 030 kJ
Protein	30.4 g
Fat, Total – Saturated	16.6 g 9.2 g
Carbohydrate – Sugars	46.4 g 28.0 g
Dietary Fibre	3.0 g
Sodium	67 mg

Fruity Berry Bites



Nutrient	Nutrition per 100 g (serve size 25 g)
Energy	1 385 kJ
Protein	1.6 g
Fat, Total – Saturated	4.3 g 3.3 g
Carbohydrate – Sugars	68.0 g 51.5 g
Dietary Fibre	10.9 g
Sodium	55 mg

Granny's Fibre Chews



Nutrient	Nutrition per 100 g (serve size 30 g)
Energy	1 380 kJ
Protein	5.9 g
Fat, Total – Saturated	3.0 g Less than 1 g
Carbohydrate – Sugars	47.8 g 18.0 g
Dietary Fibre	25.0 g
Sodium	147 mg

Resource B: Rice-based meals

Rice'n'Chicken Mix



Nutrient	Nutrition per 100 g of cooked rice
Energy	635 kJ
Protein	2.4 g
Fat, Total – Saturated	6.3 g 1.0 g
Carbohydrate – Sugars	21.3 g 1.7 g
Dietary Fibre	Information not given
Sodium	435 mg

EZY Long Grain Rice



Nutrient	Nutrition per 100 g of cooked rice
Energy	630 kJ
Protein	3.2 g
Fat, Total – Saturated	0.5 g 0 g
Carbohydrate – Sugars	32.8 g 0.2 g
Dietary Fibre	0.4 g
Sodium	Less than 5 mg

MG Brown Rice (pre-cooked)



Nutrient	Nutrition per 100 g of cooked rice
Energy	781 kJ
Protein, Total – Gluten	4 g 0 mg
Fat, Total – Saturated	3 g Less than 1 g
Carbohydrate – Sugars	34 g Less than 1 g
Dietary Fibre	3 g
Sodium	Less than 5 mg
Niacin	1.2 mg
Magnesium	52 mg
Potassium	130 mg

Answers and explanations

Achievement Standard 90960
(Home Economics 1.5): Demonstrate understanding of how an individual, the family and society enhance each other's well-being

AS 90960: 2014 Assessment specifications

Issues such as the following may be considered:

- mutually supportive environment between individuals, family, and society
- co-operation
- impact of a given scenario on all dimensions of the well-being of individuals and families.

Guided practice questions

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1. a. **Physical:** Young women following Lisa's advice and example would eat healthy food so that with good nutrition they would have strong bones and teeth, healthy skin and hair, a well-functioning brain and good control of their weight. They would be well placed to avoid lifestyle diseases such as Type 2 diabetes in the future. They would also have restful sleep and prolonged high energy levels, which would help them lead a full life and do well at school or at work.

Mental and emotional: Young women would enjoy taking Lisa's advice, because Lisa is an expert in this field. Any stress about not knowing what to buy, cook and eat would be reduced as they learned from Lisa and other contributors to her Facebook page. With Lisa's support, her followers would become motivated to make positive changes. Many young women might appreciate the challenge of changing to healthy eating and feel good about the steps they were taking to do so. After a while, they might find that correct nutrition was easy to practise. They would have less stress as they continued to improve their own well-being.

Social: Young women going to Lisa's classes would meet Lisa and other people and make new friends with similar interests whose company they would enjoy. As part of the online Facebook community they would communicate frequently, network and share ideas. With more energy at work or school, the young women would get on well with colleagues, teachers and their families. Being fit would help them enjoy a range of activities through which their social life could be enhanced.

Spiritual: People going to Lisa's classes would enjoy a sense of belonging to a group led by a powerful role model. They would feel valued by Lisa and each other as people sharing common values and beliefs in good nutrition. Being a member of Lisa's classes would improve the young women's self-esteem.

- b. Lisa Challinor is a well-known, successful person who has competed with distinction in beauty contests, so she must be physically healthy and fit. She is professionally trained in nutrition and sports science, so people can believe what she says – her advice is credible. Lisa is working in a group with other health professionals who trust her expertise, which gives her further credibility. She is young, which gives her a common bond with other young women who face similar issues and she can be a good role model for them.

Lisa is genuinely motivated to improve young women's nutrition, because she understands from experience the importance of a healthy diet.

Young women can communicate with Lisa and one another through Lisa's Facebook page, which she updates each day, providing online support and touching the lives of other young women.

Lisa Challinor aims high and reaches her own goals, so she can successfully inspire others.

2. a. **Physical:** Physical work goes into the tasks that are assigned, e.g. collecting food from bins for the worm farm; gardening activities as needed, which results in improved fitness for those carrying out the tasks; students and staff can make use of the produce, and can purchase worm 'tea' for their families to use on their gardens – the vegetables produced in family gardens add nutrients and fibre to the daily diets of family members and other people in the community who consume them, which improves their nutritional health. In addition, gardening activities (and the physical exercise involved) is encouraged in the community.

Mental and emotional: Students in the activity groups will feel good about being included and feel the sense of achievement that comes from doing a task (e.g. completing a newsletter); they will enjoy communicating ideas during meetings, making presentations at assembly and solving problems together. They will also feel good about helping to meet the needs of themselves and others in the community, relieving the financial stress of buying expensive vegetables. They will have improved self-confidence due to the new focus in their lives. Other students and staff will enjoy hearing about what the groups are doing within the school and will be happy to help the groups. All students will gain new knowledge and skills concerning sustainable practices. Parents and friends will also learn new skills from information in the newsletters; they can make a contribution with plants, can buy products and get involved.

The wider community will gain confidence in the students and their produce, as the students pass on knowledge to the community (newsletters / kindergarten visits / recycling / worm farm).

Social: There will be many positive social interactions as members of the groups work together, helping each other, carrying out activities and building friendships. They will be sharing eco-friendly practices with other group members and in the community.

Other students might assist the groups in their activities (e.g. litter control, recycling, use of garden produce) and group members will be meeting other people when carrying out various activities (e.g. weeding, talking to kindergarten students).

Some staff will be involved in the supervision of the groups and will share the goals and activities of the groups with other teachers and the community (caregivers, other schools).

There will be a sense of community and inclusiveness with produce being shared, which can have a flow-on effect to other areas of community life. Supportive community networks will be established as people learn about the work of their local school.

Spiritual: Mixing with others and sharing the same values and beliefs about the importance of sustainability will give members of the activity groups a sense of belonging and they will value contributing to the groups.

Other students will see that the garden, weeding, and promotion of environmentally friendly practices are all worthwhile and useful to the school and community. They, staff, parents and friends will value the groups and what they are doing and will feel valued and useful themselves when they support the work of the groups.

People at the kindergarten will value being included as a community group and appreciate the sharing of knowledge with younger children. In this way all community members will gain a sense of belonging from which will come improved self-esteem.

- b. a. activity groups; b. positive / important / good; c. students; d. well-being; e. influence / inspire / encourage; f. dimensions / aspects; g. depends; h. enthusiasm / eagerness / interest; i. improvement / enhancement; j. success / accomplishment; k. satisfaction / fulfilment / happiness; l. enhanced / improved / increased.

NCEA Questions

p. 11

Examples of 'Excellence' answers follow. These are examples only and other answers might also be suitable. You should check your answers with your teacher.

Question One

- Physical:** A student's well-being is improved physically by increasing his or her daily intake of milk by one serve each school day through the Milk for Schools programme. Milk is an important source of protein, carbohydrates, calcium, vitamins and minerals, all of which are important for strong, healthy bones and teeth, so drinking more milk will contribute to the student's current physical health and lessen their chance of developing osteoporosis in the future. By belonging to the Breakfast Club a student might not only eat Weet-bix and milk twice a week, which would give the student a healthy start to those days, supporting sustained energy, concentration and learning, but the student might also be encouraged to make breakfast at home on the other days, which would increase his or her overall intake of carbohydrate, fibre, vitamins and minerals.
 - Mental and emotional:** Students will feel good about getting together with others in a caring environment to drink milk or eat breakfast. They will feel supported and ready to meet the demands of the school day if they are not hungry in the morning. Eating food or drinking milk that contains many nutrients helps students rise to the challenge of their busy lives. In addition, students are encouraged to complete their homework before or after breakfast, which will give them a positive outlook for the day. The Breakfast Clubs have been shown to lead to 'improvements in behaviour, concentration, attendance and punctuality'.
 - Social:** Milk for Schools and the Breakfast Clubs will provide opportunities for students to feel connected with others and to cooperate and develop positive relationships with those who are taking part in the projects, either as participants or as helpers. Having a common experience such as preparing and eating breakfast together provides opportunities for students to develop social skills such as table manners, sharing, taking turns and self-help skills. Older children can take responsibility for younger children and all will develop bonds over time.
- Spiritual:** Students will develop shared values around the importance of nutritious food. They will also become more self-aware through putting such values into practice as part of a larger group, and they should have raised self-esteem through being cared about and caring for others on a daily basis.

A student who is involved in the Milk for Schools and Breakfast Clubs programmes could motivate other family members to make a nutritious breakfast at home each day and/or to purchase more milk for the family. This would not only improve the family's physical health, but it would also help the family build relationships as they would all contribute to adopting a healthy lifestyle, especially if the student taught and empowered other family members (e.g. parents) to make a healthy breakfast, to store milk correctly in the fridge, or about the value of consuming milk. By sharing knowledge and skills, the student would receive respect from his or her parents and siblings, which would raise his or her self-esteem. The opportunity to teach siblings could help make the siblings aware of important family values around food and sharing (e.g. making their own breakfasts and breakfast for others). Older people in the family would appreciate the student's efforts and help and would enjoy learning from, talking with and sharing their own food knowledge with the student and other family members. Some older family members might act as volunteers for the programmes, which would enhance all aspects of their own well-being.
- The 'KickStart Breakfast' programme and the 'Fonterra Milk for Schools' programme rely on cooperation between Sanitarium, Fonterra and other sponsors (who provide transport, fridges and equipment) and volunteers such as parents, teachers and friends of the schools who participate in the programmes. Media are also involved – schools join the programmes online, there are dedicated websites for the programmes and advertising exposure for the companies that take part.

Families can benefit from not needing to pay for some milk and breakfasts, which will help family budgets. Growing children need fibre, carbohydrate, vitamins and minerals for optimal health, and the free milk and Weet-bix will enhance the physical well-being of programme participants, which will have a spin-off effect on their families with fewer visits to the