**NZQA**

**Approved**

Achievement standard: 90956 Version 3

Standard title: Demonstrate knowledge of an individual’s nutritional needs

Level: 1

Credits: 5

Resource title: Fuelling the workers

Resource reference: Home Economics VP-1.1 v2

Vocational pathway: Primary Industries

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| Date version published | February 2015 Version 2To support internal assessment from 2015 |
| Quality assurance status | These materials have been quality assured by NZQA. NZQA Approved number A-A-02-2015-90956-02-7258 |
| Authenticity of evidence | Assessors/educators must manage authenticity for any assessment from a public source, because learners may have access to the assessment schedule or exemplar material.Using this assessment resource without modification may mean that learners’ work is not authentic. Assessors/ educators may need to change figures, measurements or data sources or set a different context or topic to be investigated or a different text to read or perform. |

Vocational Pathway Assessment Resource

Achievement standard: 90956

Standard title: Demonstrate knowledge of an individual’s nutritional needs

Level: 1

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Resource title: Fuelling the workers

Resource reference: Home Economics VP-1.1 v2

Vocational pathway: Primary Industries

Learner instructions

# Introduction

This assessment activity requires you to demonstrate knowledge of the nutritional needs of a physically active forestry worker.

You are going to be assessed on how comprehensively you plan, prepare and serve food and liquid to meet the nutritional needs of a physically active forestry worker. This will involve justifying why your chosen food, liquid and preparation practices meet their nutritional needs.

The following instructions provide you with a way to structure your work so you can demonstrate what you have learnt and achieve success in this standard.

Assessor/educator note: It is expected that the assessor/educator will read the learner instructions and modify them if necessary to suit their learners.

# Task

A forestry worker is going to complete the fencing around a recently planted forestry site and will be staying in a small hut overnight. Before beginning this assessment activity, you need to prepare a profile of the forestry worker who is the focus of this task. Some material has been provided for you, but you will need to add to this information.The day will consist of intense physical activity.

There are no cooking facilities during the day. Fires of any sort are not allowed in the forest area.

The site huts where the forestry worker will stay overnight is equipped with basic stove top cooking facilities, cooking and eating utensils as well as basic dry ingredients (salt, pepper, flour, etc).

You can decide:

* the person’s age (teenager or adult)
* the person’s food likes and dislikes
* any other relevant information.

## Part 1: Develop a food plan

Plan one day’s food and liquid, to meet the nutritional needs of the physically active forestry worker. Consider the types of foods that are particularly useful for maintaining the body’s ability to deal with an intensively active day. Think about nutrients required to:

* begin a physically active day
* maintain energy levels throughout the day
* build, maintain and repair cells and muscle mass
* replace essential vitamins and minerals
* maintain body fluids.

Also keep in mind the limitations on cooking facilities and the importance of food safety.

Use the format provided by your assessor/educator to assist in developing your plan.

Your assessor/educator may provide you with a selection of recipes from which to choose a main meal suitable for your forestry worker. This selection will include some recipes that are suitable as well as some that may not meet all their requirements or may require adaptation. This is to enable you to demonstrate your knowledge by making an appropriate choice of food suitable for the forestry worker. Alternatively, you can use a recipe (or recipes) of your own choice.

Make sure your plan:

* meets the specific needs of the forestry worker
* applies recommendations from the *Food and Nutrition Guidelines* for a very active teenager or adult
* includes a description of all the meals, snacks, and liquids the forestry worker will consume in one day
* states the serving quantities or volumes of all planned food and liquid
* includes details of the main meal you will prepare, including cooking methods.

The evening meal needs to include at least two processes and each process must include at least three techniques. You also need to be able to prepare and serve this meal using the equipment that is available in forestry huts.

## Part 2: Prepare, cook and serve your planned main meal

Develop a logical order of work to follow as you prepare your meal.

Individually prepare, cook and serve the main meal that you planned. Attach a copy of your chosen recipe/s and the logical order of work to your food plan.

Provide a shopping list of your ingredients.

## Part 3: Justify your food plan

Explain, using detailed examples, how the planned food and liquid for one day follows the *Food and Nutrition Guidelines* for the forestry worker and meets their nutritional needs. You need to justify your choices. Consider:

* the total amount/volume of the food and liquids included
* the type and variety of food and liquids included
* what and how much was served at the different eating occasions including snacks eaten during the day
* the preparation and cooking practices that were included
* what nutrients were provided, their function and relevance to the forestry worker’s needs.

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Assessor/Educator guidelines

# Introduction

The following guidelines are supplied to enable assessors/educators to carry out valid and consistent assessment using this internal assessment resource.

As with all assessment resources, education providers will need to follow their own quality control processes. Assessors/educators must manage authenticity for any assessment from a public source, because learners may have access to the assessment schedule or exemplar material. Using this assessment resource without modification may mean that learners' work is not authentic. The assessor/educator may need to change figures, measurements or data sources or set a different context or topic. Assessors/educators need to consider the local context in which learning is taking place and its relevance for learners.

Assessors/educators need to be very familiar with the outcome being assessed by the achievement standard. The achievement criteria and the explanatory notes contain information, definitions, and requirements that are crucial when interpreting the standard and assessing learners against it.

# Context/setting

This activity requires learners to demonstrate their knowledge of the nutritional needs of a person with a highly physical working day. The learner needs to comprehensively plan the food and liquid required for the forestry worker for a full day and justify why they chose the food, liquid and preparation practices.

The main meal from the plan must be prepared and served.

# Conditions

Learners will work individually to complete the assessment activity. They can refer to sources of relevant information. However, make sure the learner processes and applies this material to the forestry worker’s nutritional needs.

# Resource requirements

Provide a selection of your own recipes for learners to choose from, or encourage them to select an appropriate recipe of their own choice. Make sure that your recipes include some that are not suitable, so learners have the opportunity to demonstrate their knowledge by making an appropriate choice.

As well as the materials provided in this activity, learners need the following:

* Access to recipes.
* A format or template to help the learner plan the food and liquid for their individual. Writing only a menu plan may limit their ability to provide the necessary detail. The format or template should enable the learner to include the following:
	+ a detailed menu or description of each meal and snack including liquids
	+ sections/columns to break the menu into the four food groups including detailed quantities or volumes of each food and liquid
	+ a liquid column or section
	+ a section for the ‘extras’ (high fat, salt and sugar foods)
	+ a section for cooking methods.
* A range of ingredients.
* Access to appropriate facilities that allow them to prepare food safely and hygienically.
* A checklist that both learners and the assessor/educator can use to verify the *Food and Nutrition Guidelines* followed in the practical work.

Useful websites for nutrition information:

[www.heartfoundation.org.nz](http://www.heartfoundation.org.nz)

[www.moh.govt.nz](http://www.moh.govt.nz)

[www.nutritionfoundation.org.nz](http://www.nutritionfoundation.org.nz)

# Additional information

None.

## Other possible contexts for this vocational pathway

People involved in employment or activities where nutritional needs may differ to an average individual’s needs could include:

* farmers/farm workers while shearing, wool handling/pressing, lambing and calving, high country mustering
* fire fighters, fishing deckhands, vineyard or orchard workers during harvesting/picking, jockeys, farriers, hunters or trappers.

# Assessment schedule: Home Economics 90956 – Fuelling the workers

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| Evidence/Judgements for Achievement | Evidence/Judgements for Achievement with Merit | Evidence/Judgements for Achievement with Excellence |
| The learner demonstrates knowledge of an individual’s nutritional needs by:* planning food and liquid that meets the nutritional needs of a physically active forestry worker

For example, the learner:uses a recognised food classification model, e.g. the *Food and Nutrition Guidelines*, to plan the food and liquid intake. The food plan includes:* + a description of all the meals, snacks, and liquids for one day
	+ the serving quantities or volumes of all planned food and liquid

adjusts the number of serves for some of the food groups (from the *Food and Nutrition Guidelines*) to show how the energy and liquid requirements will be met.*The food plan contains nine serves of wholegrain bread and cereals spread throughout the day – 1 cup of porridge and 2 slices of toast for breakfast with 1 cup of baked beans along with 1 glass of low fat milk and 1 cup of tea.** preparing, cooking and serving food and liquid that meets the nutritional needs of a physically active forestry worker

The learner chooses a main meal from the plan including two processes that:* + follow a logical work order to ensure maximum nutrient retention
	+ consider the limited facilities and equipment
	+ is not heavily salted
	+ uses low fat cooking methods.

An appropriate portion is served, e.g. Spaghetti Bolognaise: 2 c spaghetti, 1 c meat sauce, ½ c peas, ½ c carrots.(Reasons for the food plan choices are not a requirement for Achievement.)*The above expected learner responses are indicative only and relate to just part of what is expected.* | The learner demonstrates in-depth knowledge of an individual’s nutritional needs by: * planning food and liquid that meets the nutritional needs of a physically forestry worker

For example, the learner:uses a recognised food classification model, e.g. the *Food and Nutrition Guidelines,* to plan the food and liquid intake. The food plan includes:* + a description of all the meals, snacks and liquids for one day
	+ the serving quantities or volumes of all planned food and liquid

adjusts the number of serves for some of the food groups (from the *Food and Nutrition Guidelines*) to show how the energy and liquid requirements will be met.*The food plan contains nine serves of wholegrain bread and cereals spread throughout the day – 1 cup of porridge and 2 slices of toast for breakfast with 1 cup of baked beans along with 1 glass of low fat milk and 1 cup of tea.** explaining how and why the chosen food and liquid in the food plan meet the nutritional needs of the physically active forestry worker

For example, the learner:links their reasons to a food classification model such as the *Food and Nutrition Guidelines,* and the specific needs of the physically active forestry worker.*The* Food and Nutrition Guidelines *recommend between 6 to 8 cups of water a day. However, physical activity means that you need a lot more fluid as you lose so much through sweating. It also helps to keep the body cool and hydrated to ensure you don’t get headaches. In my food plan I have included low fat milk, a glass of diluted fruit juice, 2 cups of tea and plain water.** preparing, cooking and serving food and liquid that meets the nutritional needs of a physically active forestry worker

The learner chooses a main meal from the plan including two processes that:* + follow a logical work order to ensure maximum nutrient retention
	+ consider the limited facilities and equipment
	+ is not heavily salted
	+ uses low fat cooking methods.

An appropriate portion is served for the physically active forestry worker, e.g. Spaghetti Bolognaise: 2 c spaghetti, 1 c meat sauce, ½ c peas, ½ c carrots.*The above expected learner responses are indicative only and relate to just part of what is expected.* | The learner demonstrates comprehensive knowledge of an individual’s nutritional needs by:* planning food and liquid that meets the nutritional needs of a physically active forestry worker

For example, the learner:uses a recognised food classification model, e.g. the *Food and Nutrition Guidelines*, to plan the food and liquid intake. The food plan includes:* + a description of all the meals, snacks and liquids for one day
	+ the serving quantities or volumes of all planned food and liquid

adjusts the number of serves for some of the good groups (from the *Food and Nutrition Guidelines*) to show how the energy and liquid requirements will be met.*The food plan contains nine serves of wholegrain bread and cereals spread throughout the day – 1 cup of porridge and 2 slices of toast for breakfast with 1 cup of baked beans along with a 1 glass of low fat milk and 1 cup of tea.** explaining how and why the chosen food and liquid in the food plan meets the nutritional needs of the physically active forestry worker

For example, the learner:links their reasons to a food classification model, such as the *Food and Nutrition Guidelines*,and the specific needs of the physically active forestry worker.*The* Food and Nutrition Guidelines *recommend between 6 to 8 cups of water a day. However, physical activity means that you need a lot more fluid as you lose so much through sweating. It also helps to keep the body cool and hydrated to ensure you don’t get headaches. In my food plan I have included low fat milk, a glass of diluted fruit juice, 2 cups of tea and plain water.** justifying why the chosen food, liquid and preparation practices meet the nutritional needs of the physically active forestry worker

For example, the learner:links the food and liquid choices with the function of the nutrients and their relevance to the nutritional needs of the physically active forestry worker.*I have included baked beans for breakfast as they are a secondary protein source and have a low glycaemic index, meaning that they cause a slow release of glucose into the blood. These, along with a plate of porridge, which is a good slow release carbohydrate food, will help sustain the forestry worker’s energy levels throughout the day.** preparing, and serving food and liquid that meets the nutritional needs of a physically active forestry worker

The learner chooses a main meal from the plan including two processes that:* + follow a logical work order to ensure maximum nutrient retention
	+ consider the limited facilities and equipment
	+ is not heavily salted
	+ uses low fat cooking methods.

An appropriate portion is served for the physically active forestry worker, e.g. Spaghetti Bolognaise: 2 c spaghetti, 1 c meat sauce, ½ c peas, ½ c carrots.*The above expected learner responses are indicative only and relate to just part of what is expected.* |

Final grades will be decided using professional judgement based on an examination of the evidence provided against the criteria in the Achievement Standard. Judgements should be holistic, rather than based on a checklist approach.