

Food groups activity

Introduction for kaiako

When building the foundations of nutrition knowledge, learning about the four food groups is a great place to start. The Four Food Groups activity features cards with food pictures from the four food groups, emphasising whole and less processed foods, close to how they are found in nature. It also includes cards that highlight the key nutrients these foods provide.

Objectives

1. To demonstrate which foods are in the four food groups and understand why it is beneficial to include these foods in meals and snacks.
2. To understand which nutrients are found in each food group and how these help the body.
3. To give ākonga tools to support hauora.

How to talk to ākonga about food

These activities are designed to be enjoyable and to spark curiosity and excitement in tamariki about exploring food. Building positive connections with food during childhood can shape healthy eating habits that last a lifetime.

- Avoid labelling foods as ‘good/bad’, ‘junk/treat’, ‘everyday/sometimes’ – instead call the foods by their names, e.g. chocolate or bananas.
- Avoid discussing diets, body weight and size, and making comparisons like healthy vs unhealthy foods with or in front of ākonga.
- All foods can be part of a healthy way of eating – it’s all about balance.
- Focus on the functions that food helps the body to do, e.g. enabling learning, running fast, growing tall, and feeling full, instead of labelling foods as healthy/unhealthy.
- Avoid using food as a reward – stick with non-food rewards. Using food as a reward may send the message that these foods are more appealing than others.

Learning outcomes

Ākonga will:

- visually explore the variety of food within each food group, reveal the nutrients they offer, and demonstrate how these nutrients help the body.
- recognise different ways food can help our bodies.
- link food variety with the growth and development of the body and its functions.

Lesson

Introduction to four food groups

Ākonga are introduced to the foundations of nutrition knowledge, and learning about the four food groups and nutrients they offer.

Introductory learning activities

Before beginning the activity:

- Discuss with ākonga why food is important for hauora (physical, mental, spiritual, whānau).
- Talk about why the body needs food from the four food groups each day.
- Explain why eating a variety of foods is beneficial to the body e.g. provides energy to play sports, builds strong bones, or helps the brain think and learn for activities like reading books and doing art.
- Discuss why it is important to include foods from ALL the different food groups in meals and snacks.
- Discuss the different food groups and which foods may go under each heading. Below are some key statements, explanations and examples about each food group you may want to integrate into the introduction of the activity:
 - **Vegetables and fruit** – choose to eat a rainbow of colours from this group, they provide vitamins, minerals and fibre for the immune system, digestive system and keep us full for longer.
 - **Grain foods** – such as breads, cereals, rice, pasta. Choose wholegrain options for support of the digestive system (e.g. wholemeal/whole grain bread instead of white bread), provide carbohydrates (energy to play sports) and fibre (keep us full for longer).
 - **Milk and milk products** – provide protein for growing muscles and calcium for strong bones and teeth.
 - **Plant/animal sources of protein** – e.g. legumes, nuts, seeds, fish, seafood, eggs, chicken and meat – provide protein and iron for growing bodies and brain development.
- Discuss with ākonga what types of foods they may have for breakfast, lunch, dinner and snacks and which food groups those foods come from.*
**Not all ākonga will always have access to the food they need to thrive. Food insecurity can present at different times in people's lives. Be mindful of your*

ākonga and their home environment when asking questions about food choice and access as these are not always available to ākonga.

Resource and materials

Food groups activity cards Kete Kai has 76 cards including:

- 60 food picture cards
- 8 nutrient cards
- 4 food group cards
- 4 blank cards

Food group activities

Adaptable for children 5 – 12 years of age.

Level 1	Choose a selection of food picture cards from the four food groups. Activity 1: Food colour sort and discussion. Lay out the cards and ask ākonga to look for all the fruits and vegetables. Then, have them sort and identify the red, green, yellow, orange, purple, and white ones. Encourage a discussion about how each colour helps our body in different ways. For more information refer to the link to <i>5+ A Day, Eating a Rainbow</i> under 'other supporting nutrition resources' on page 7 of this resource. Activity 2: Draw the colours of the rainbow:
Curriculum	Ask ākonga to use cards or pictures of different vegetables and fruit to create a rainbow <i>Links:</i> • <i>Health and Physical Education - personal health and physical development</i> • <i>The Arts</i> • <i>English – speaking, writing and presenting</i>
Level 2-3	Use all the food picture cards from four food groups and their headings. Activity 1: Place food group cards. Sort ākonga into groups, give each group a set of cards and ask them to place the food picture cards under the correct food group headings. See model answers for the correct placement, pages 8 - 9.

Curriculum	Activity 2: Sensory evaluation. Individually, in pairs, or in groups, ask ākonga to select a food card. Encourage them to describe the food's appearance, texture, taste, and smell in their own words. Discuss the use of descriptive language, and guide them to avoid emotive terms such as 'yum' or 'yuck'. Activity 3: Where food comes from. Spread out the cards and ask ākonga to identify where food comes from. For example, the sea, the farm, a tree, underground (to link this to Te Ao Māori refer to the <i>Science Learning Hub</i> resource under 'other supporting nutrition resources' on page 7). <i>Links</i> • <i>Health and Physical Education – personal health and physical development</i> • <i>English – speaking, writing and presenting</i> • <i>Science - material world; living world</i> • <i>The Arts – visual arts</i> • <i>Mathematics and Statistics – geometry and measurement</i>
Level 3-4	Use all the food picture cards including the nutrient and four food groups headings cards. Activity 1: Place food group cards. Divide ākonga into groups and give each group a set of food picture cards. Ask them to sort the cards by placing each food under the correct headings. Once the foods are sorted, have them match the corresponding nutrients to each food group. Finally, invite each group to share and present their completed food group chart to the class. See model answers for the correct placement, page 7 – 8. Activity 2: Researching nutrients. Allocate each group a nutrient to investigate e.g. protein, carbohydrates, calcium, fibre or vitamins and minerals. Ask ākonga to present their findings as a poster or similar. Use credible nutrition information from 'other supporting nutrition resources' on page 7 to support these two activities.
Curriculum	<i>Links:</i> • <i>Health and Physical Education - personal health and physical development</i> • <i>English – speaking, writing and presenting</i> • <i>The Arts – visual arts</i> • <i>Science – material world</i>

Model answers for food group activities

The correct placement of food picture cards, headings and nutrients are displayed on pages 7 – 8.

Extension activities

- **Eat the colours of the rainbow.** Use the rainbow song or the rainbow story to talk to ākonga about eating a rainbow of colours. Which foods have the colours of the rainbow?
- **Food group snap!**
- **Food group fractions.** Create an activity using the Kete Kai four food group cards to demonstrate fractions or percentages.
- **Taboo.** A game where ākonga describe a fruit or vegetable without saying the name of it.
- **Creative corner.** Assign a food group to each group of ākonga and ask them to create a collage of pictures and words that describe that food group and how it affects the body.
- **What food am I?** Put a post-it note with a food written on it on a student's forehead. Student then goes around the room asking others a 'yes' or 'no' question to guess what food they are.

Glossary

Calcium: a mineral that helps us build strong bones and teeth.

Carbohydrates: a macronutrient which is the primary fuel for our muscles and brain. It provides energy for activities such as writing, playing and gardening.

Fat: a macronutrient which there are two types:

- 1) saturated fat mainly from animal sources such as butter, cream, white fat on meat, skin on chicken and coconut fat. Limit the foods high in saturated fat.
- 2) unsaturated fat from plant sources such as olive oil, nuts, seeds, avocado and oily fish such as salmon. We should eat more foods that contain unsaturated heart healthy fats.

Fibre: often labelled as dietary fibre and is only found in plant foods. Fibre is beneficial for good digestion, keeping us regular and helps us to feel full for longer.

Four Food Groups:

- vegetables and fruit
- grain foods
- legumes, nuts, seeds, fish and other seafood, eggs, poultry, and red meat with fat removed
- milk and milk products

These include a variety of everyday foods that provide all the nutrients our body needs to function properly.

Iron: a mineral we need to help carry oxygen around our body.

Lean meat: flesh of an animal, as food, with the fat removed.

Legumes: include different types of beans and peas such as chickpeas, kidney beans, baked beans, peanuts and lentils. A plant based source of protein. They are high in fibre and important for maintaining good gut health.

Nutrients: nutrients are compounds found in food and drink that the body needs to function properly. Nutrients can be divided into two groups: macronutrients (protein, carbohydrates and fats) and micronutrients (vitamins and minerals).

Protein: a macronutrient which provides the building blocks for our bodies and is needed to make muscles, organs, blood, skin, hair, etc.

Salt: also referred to as sodium. Our bodies need sodium for our muscles, brain and heart to work. Having too much sodium over time can put extra pressure on the heart and kidneys. Many packaged foods contain sodium.

Sugar: a carbohydrate, found naturally in fruits, vegetables, milk and milk products. Also added to food during food processing.

Vitamins and minerals: also known as micronutrients, these compounds are needed in very small amounts by the body and play a very important role in maintaining good health. Each vitamin and mineral has a different function in our body. For example vitamin C helps us fight infections while calcium helps to build strong bones.

Whole grains: grains that are close to how they are found in nature such as oats and brown rice. They contain fibre and beneficial nutrients our body needs.

Other supporting nutrition resources

Healthify - He Puna Waiora, Food Groups. More info about food groups, nutrients, macro- and micronutrients: <https://healthify.nz/hauora-wellbeing/f/food-groups/>

5+ A Day, Eating a Rainbow. Primary school resource to explore the importance of eating fruit and vegetables: <https://5adayeducation.org.nz/learning/primary/lesson-3>

Science Learning Hub, Te ao Māori concepts within Kiwi Kai. Resource for teachers to understand the underpinning science and te ao Māori concepts within Kiwi Kai: <https://www.sciencelearn.org.nz/resources/3240-te-ao-maori-concepts-within-kiwi-kai>

Science Food for Thought – Empowering Healthier Futures
<https://www.foodforthought.co.nz/>

Model answers for food group activities

Curriculum Level 2-3 example (Four Food Groups)

Huawhenua me te huarākau Vegetables and fruit



Ngā kai pata Grain foods



Miraka me ngā hua miraka Milk and milk products



Hua wharekano, nati, kano, ika, kaimoana, hēki, heihei, miti tūpuhi

Legumes, nuts, seeds, fish,
seafood, eggs, chicken and
lean meat



Curriculum Level 3-4 example (Four Food Groups and Nutrients)

Huawhenua me te huarākau Vegetables and fruit

Ngā huaora me ngā kohuke
Vitamins and minerals

Weu
Fibre



Ngā kai pata Grain foods

Ngā warowaihā
Carbohydrates

Weu
Fibre



Miraka me ngā hua miraka Milk and milk products

Konupūmā
Calcium

Pūmua
Protein



Hua wharekano, nati, kano, ika, kaimoana, hēki, heihei, mīti tūpuhi Legumes, nuts, seeds, fish, seafood, eggs, chicken and lean meat

Rino
Iron

Pūmua
Protein



