

A photograph of three young children wearing hats (red and blue) and working in a garden. One child in the foreground is wearing a blue hat and looking down at the soil. Another child in the background is wearing a red hat and holding a shovel. A third child in the foreground is wearing a red hat and looking towards the camera. They are all engaged in gardening activities, with a shovel and a small plant visible. A large red decorative swirl is overlaid on the right side of the image.

Food for Under 5s

A practical guide to
food and nutrition for
Early Learning Services



SPECIAL ACKNOWLEDGEMENTS

Food for Under 5s is a resource developed by Auckland Regional Public Health Service (ARPHS) and published originally in 2009 for Early Learning Services to assist them in making healthy choices for the children in their care. It aims to provide information about nutritious food required for growth and development of children aged 5 and under. The Heart Foundation have had the privilege of updating this resource in collaboration with ARPHS.

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The Reed Charitable Trust and The Ministry of Health for funding.

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Section 1

Introduction

Early Learning Services provide a special environment and have the ability to make a positive impact in a child's early years. Lifelong eating habits are formed in early childhood so this is the perfect time to establish healthy relationships with nutritious food and provide positive role modelling for children as well as parents and whānau.

Early Learning Services have the ideal opportunity to help set in place a healthy relationship with food, as many children will spend up to nine hours a day in care. Developing a healthy kai culture can be done through:

- giving consistent messaging
- having a supportive nutrition and health policy
- weaving health and nutrition into the curriculum.

CONSISTENT MESSAGING

Children learn primarily through watching and doing, so we play a very big part in role modelling healthy behaviours. It can be confusing for children when we are telling them one thing and doing another.

Role modelling being healthy can be having healthy conversations about food, the body and where food comes from. Also preparing, cooking, and sharing a nutritious meal together.

Peers can also act as strong role models especially when it comes to trying new foods. Pairing adventurous eaters with more cautious or fussy eaters can have a great impact on eating behaviour.

Parental influence will also have a large impact, so providing information and support for parents and caregivers about your centre's health philosophy, policies and nutrition can help them with healthy choices for their children.



FOOD AND NUTRITION POLICY

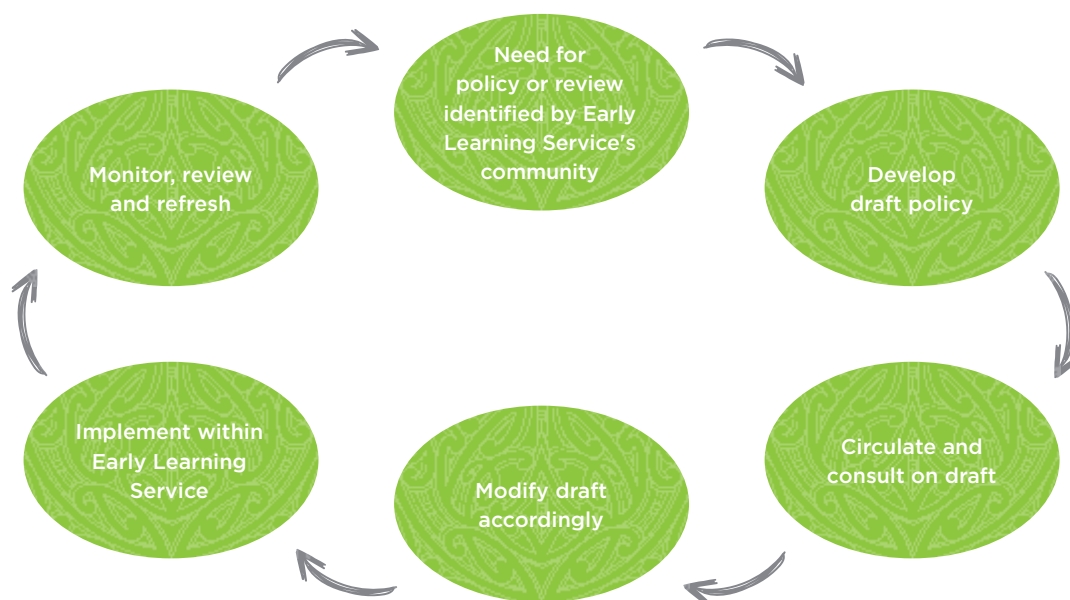
A nutrition policy provides a set of guidelines and communicates centre philosophy to staff, parents and the wider community. Policy not only helps to ensure children are getting nutritious quality food, but also allows parents and whānau to be involved.

Your policy should include three things.

1. A clear rationale for the reasons behind policy.
2. Goals, objectives and ideal outcomes.
3. Clear strategies around how the centre will achieve its outcomes.

Best practice policy development involves consultation from centre staff, management, parents and whānau and should be tailored to the Early Learning Service's community needs. It is good to have a system in place that allows for consultation, modification, implementation and review (see flowchart below).

A policy is most effective when adhered to in all aspects of the centre including celebrations, parent evenings and special days.



When planning your policy some nutrition and physical activity areas to consider are:

- How are nutrition and physical activity promoted in your centre?
- Do children engage in regular nutrition and physical activity education?
- Do staff role model healthy eating?
- Do your centre's practices reflect your commitment to providing a healthy environment?
- Do staff have the opportunity to upskill and learn through professional development opportunities?
- How do you support parents/whānau in learning about nutrition and physical activity?
- If you fundraise, how will you incorporate healthy eating and physical activity?
- How will you celebrate special occasions while aligning with your healthy eating philosophy?
- How will you promote and support breastfeeding in your ELS?
- Does your centre have a commitment to providing resources which support your nutrition and physical activity ethos?

For more information and policy templates please go to heartfoundation.org.nz



CELEBRATIONS

Celebrations are a fantastic learning opportunity for children and a way of bringing whānau together in early learning. They are a great way of sharing milestones, building relationships and acknowledgement of different cultures.

In creating a healthy environment it is also important to include healthy foods for celebrations. In a large centre, it is possible that a birthday celebration is held every other day. Special “occasion” foods lose their treat factor and become expected.

Moving the focus of birthday celebrations more onto the child and away from food can keep the occasion special but remove the need for food.

For more information see the Heart Foundation’s *Healthy Celebrations* book.

heartfoundation.org.nz

TE WHĀRIKI AND NUTRITION

Weaving nutrition and physical activity through everyday teaching activities is a great way to get children thinking in a creative way about their bodies and how they work.

Empowering children to view their learning and wellbeing through all aspects of play enables a child to develop holistically. Encourage and inform whānau on the importance of whole-body wellness, and how this impacts on learning.

Activities can be incorporated into the Wellbeing, Belonging, Communication, and Exploration strands of the New Zealand teaching curriculum, Te Whāriki, and added to planning and learning story outcomes.

See Appendix 1 for examples.

Section 2

Healthy food for children

MINISTRY OF HEALTH FOOD AND NUTRITION GUIDELINES

The New Zealand Ministry of Health (MOH) has put together advice for parents, whānau and caregivers to help them make healthy choices around food and nutrition. The advice includes:

- Provide a variety of foods based on the four everyday food groups.
- Make mealtimes fun and get children involved in preparation.
- Encourage children to try new foods.
- Children have small tummies, they don't need as much as an adult.
- Don't use food as bribery, or force a child to eat.
- Don't encourage continuous eating and grazing, stick to main meals.
- Try and drink water and milk only.

For more information go to www.health.govt.nz

HEALTHY HEART VISUAL FOOD GUIDE



The Heart Foundation's Healthy Heart Visual Food Guide is similar to the Ministry of Health food and nutrition guidelines for children and based on a heart-healthy eating pattern, which emphasises whole and less-processed foods. Included are plenty of non-starchy vegetables and fruit, some whole grains in place of refined grains, legumes, nuts, seeds, and other sources of healthy fats such as oily fish. It may also include unprocessed lean meats or poultry and/or dairy.

By following a heart-healthy way of eating in the right amounts, we can meet all the nutrient needs to support good health.

Children need a variety of foods to grow and thrive. A combination of foods from the Healthy Heart Visual Food Guide provides protein, carbohydrates, fats, vitamins and minerals to sustain growing bodies.

For more information go to heartfoundation.org.nz

simple steps

Healthier eating can be easy. Why not start by taking one simple step?

Here are some ideas to add goodness to your kai:

vegetables & fruit : a variety of colours



'Add one' more vege to dinner



'Add one' salad vege to your sandwich



'Add one' coleslaw to a takeaway meal



'Add one' piece of fruit to breakfast or lunch

my step

grain foods & starchy vegetables : wholegrain & high-fibre



Swap from white bread to wholegrain



Choose baked potatoes or kumara instead of deep fried



Use wholemeal instead of white flour



or

Choose just one starchy or grainy food at a meal

my step

legumes, fish, seafood, eggs, poultry & meat : lean & skinless



Cut the fat off meat and skin off chicken



Drain the fat from canned corned beef



Add a can of legumes to a dish and use less meat



Steam, grill or pan fry fish instead of deep frying

my step

milk, yoghurt & cheese : reduced-fat



Switch to lite blue, green or yellow top milk



Swap from full fat to reduced-fat cheese



Swap from a sweet bakery item to plain yoghurt

junk food & takeaways : cut back



Try homemade instead of bought takeaways



Downsize from a big plate to a smaller size

healthy oils, nuts & seeds



Swap from butter or ghee to oils or margarine



Choose a handful of nuts for a snack instead of potato chips



Add avocado to a sandwich or salad



Swap a can of fizzy to water or milk



Swap from two scoops of ice cream to one scoop

SERVINGS AND PORTION SIZES FOR UNDER 5S

- Children have different energy needs, so there is no exact recommendation for portion sizes.
- Toddlers and pre-schoolers only have little tummies.
- If children ask for a second helping, offer extra vegetables or fruit first.
- Sit with children and talk to them to find out when they are full.
- Children go through growth spurts, so they will eat more during particular periods and their intake will decrease when they are sick.
- Encourage children to serve their own food as a way of them self-regulating how much to eat – young children are good at knowing when they are full.
- Most toddlers can regulate their own appetite so encourage them to eat but do not force them or expect them to eat if they are not hungry. Some toddlers are slow eaters so allow plenty of time for them to eat.



VEGETABLES AND FRUIT

eat most vegetables & fruit



Vegetables and fruit are a rich source of nutrients, providing energy, carbohydrate, fibre, vitamins (A and C) and minerals (potassium, magnesium, calcium). These are important for growth, bowel health, repair, vision (Vitamin A), immune function and iron absorption (Vitamin C).

VEGETABLES AND FRUIT		
Nutrient	Specific nutrient and its role in the body	Source
Carbohydrate	Energy: for growth and movement	All vegetables and fruit
Dietary fibre	Dietary fibre: essential for tummy health and bowel motions	All vegetables and fruit
Minerals	Potassium: important for muscle contraction	Dark leafy greens, potatoes, squash, avocados, mushroom, bananas
	Magnesium: important for muscle relaxation	Dark leafy greens, avocado, bananas
	Calcium: important for bone growth and teeth development	Leeks, broccoli, cabbage, spinach
Vitamins and antioxidants	Vitamin A: important for vision, also for growth, immune function, and bone modelling. Vitamin C: Important for growth and repair and helping our bodies absorb iron	Vegetables: dark leafy greens and yellow, red, orange vegetables and fruit.
	B vitamins – Folate: important for growth and brain development	Green leafy vegetables, ie. spinach, broccoli and citrus fruit.
	Phytochemicals: important for cell protection	All vegetables and fruit

- ✓ Fresh, frozen or canned (in natural juice or spring water) are equally good nutritious options.
- ✓ Buy in season, this reduces cost and improves taste!
- ✓ Variety is key, eat the colours of a rainbow.
- ✓ Puree fresh or frozen fruit, mix with water and freeze as popsicles.
- ✓ Veggie sticks or fruit kebabs may be more interesting to a child than wedges of vegetables and fruit.

Handy
hints



GRAIN FOODS AND STARCHY VEGETABLES

eat some grain foods & starchy vegetables



The grains and starchy vegetable food group includes all breads, cereals, rice, pasta and foods made from grain, noodles, tortillas/wraps, couscous, quinoa, cassava, tapioca, bulgur wheat, taro, kumara, potato, green banana.

GRAIN FOODS AND STARCHY VEGETABLES		
Nutrient	Specific nutrient and its role in the body	Source
Carbohydrate	Energy: for growth and movement	All grains and starchy vegetables
Dietary fibre	Dietary Fibre: essential for tummy health and bowel motions	All grains and starchy vegetables
B vitamins	Energy metabolism: essential for development and energy	Grains and starches, also in fortified breads and cereals

For children under the age of 2, high-fibre white, or very light brown, slices of bread are best. Over 2 years of age can tolerate more grainy wholemeal varieties.

- ✓ While wholemeal and wholegrain options are great for providing fibre, vitamins and minerals, they can easily fill up your toddler. Make sure to offer a range of foods from the four food groups.
- ✓ From 24 months onwards, toddlers will learn how to chew and swallow wholegrain breads and cereals safely.

Handy
hints



MILK, YOGHURT AND CHEESE



Milk, yoghurt and cheese are a great source of calcium which keeps our bones and teeth strong.

MILK, YOGHURT AND CHEESE		
Nutrient	Specific nutrient and its role in the body	Source
Protein	Growth: muscle development and growth	All dairy
Calcium	Strong bones and teeth	All dairy and fortified alternatives
Vitamins and minerals	Growth and energy metabolism	All dairy and fortified alternatives

Energy, protein, fat, vitamins (including riboflavin, B12, Vitamin A and D) and minerals: calcium and phosphorous, zinc and iodine. These are essential in young children for growth and muscle development.

The best sources of calcium come from dark blue top cows' milk (for children under 2 years), green, yellow or light blue (for children over 2 years), yoghurt, cheese, calcium-fortified plant-based milk (calcium and vitamin B12 fortified, eg. soy, rice, almond, however not very high in protein), soy yoghurt and cheese, milk puddings, eg. custard and sago.



Which milk is best for me?

Recommended for toddlers
between 1–2 years old

120mg calcium
2g saturated fat



Standard milk
(Blue top)

Recommended for everyone over 2 years old

125mg calcium
0.9g saturated fat



Reduced-fat milk
(Light blue top)

130mg calcium
0.2g saturated fat



Low-fat milk
(Green top)

200mg calcium
0.1g saturated fat



Low-fat milk
(Yellow top)

All plain milks contain the same amount of naturally occurring sugar. The only types of milk with added sugar are the flavoured varieties, which should only be consumed occasionally.

• Nutrition information provided above is per 100ml and these are averages only.

- ✓ If a child in your care doesn't drink milk encourage consumption of other milk products such as yoghurt, cheese or calcium-fortified, unsweetened alternatives such as calcium-fortified soy, rice or almond milk.
- ✓ Milk, yoghurt and cheese are the richest source of calcium. Other moderate sources include canned sardines, canned salmon with bones, leeks, broccoli, cabbage, spinach, dried apricots, figs, cottage cheese.
- ✓ Vitamin D helps the body absorb calcium, it is made through the action of sunlight on the skin. Playing outside before 11am or after 4pm for 10-15 minutes is sufficient to ensure adequate vitamin D. Small amounts of vitamin D can be sourced from milk, meat, egg yolk, fish and vitamin D-fortified foods.



Handy
hints

LEGUMES, FISH, SEAFOOD, EGGS, POULTRY & MEAT

eat some legumes, fish, seafood, eggs, poultry & meat

The foods in this group all contain protein and are important for your child's growth and development. Some examples include: legumes (eg. chickpeas, lentils, beans, tofu, soy), fish, seafood (eg. shellfish), eggs, poultry (eg. chicken, turkey) and lean meats (eg. beef, lamb, pork, and venison).

LEGUMES, FISH, SEAFOOD, EGGS, POULTRY, AND MEAT		
Nutrient	Specific nutrient and its role in the body	Source
Protein	Growth: muscle development and growth	All meat and alternatives
Fat-soluble vitamins	Vitamins: D: Strong bones and teeth E: Strong immune system K: Blood clotting function A: Vision and immunity	All meats
Iron	Brain growth and development	Very high in red meats, limited amounts in eggs, legumes, fish and chicken.

Animal products provide an essential source of dietary fat, however lean meats are best. Always try and remove excess fat and skin from meats. This food group provides a variety of fat-soluble vitamins and minerals (B vitamins, zinc, selenium, magnesium, potassium and phosphorus). Some of these foods, in particular red meat, are important sources of iron. Iron is essential for brain growth and development, transporting oxygen in the blood and fighting infections.

Handy hints

- ✓ Try using hummus to dip veggies or for adding legumes to a meat-based meal.
- ✓ The body absorbs iron from animal products (lean meats, poultry and seafood) more easily than the iron from plant sources (legumes, tofu, nuts and seeds)*.
- ✓ To help absorb more iron from foods, include fruit and vegetables rich in vitamin C with meals – great options include: broccoli, capsicum, brussel sprouts, citrus, kiwi, and strawberries.
- ✓ Try to reduce the amount of fat when having meats – buy lean cuts where possible or trim off visible fat on your meats and remove skin from chicken before serving.
- ✓ Try to limit the intake of processed meats such as ham, sausages, luncheon, salami and bacon – these tend to be high in saturated fats and/or salt.

*For information on choking hazards please refer to page 17.



VEGETARIAN AND VEGAN EATING

Vegetarian diets include a variety of vegetarian eating patterns depending on what animal-based foods they may choose to include.

Types of vegetarians include:

- semi-vegetarians: eat fish and/or chicken but not red meat
- lacto-ovo vegetarians: eat milk/milk products and eggs
- lacto-vegetarians: eat milk/milk products
- vegan: do not eat any food that comes from an animal.

Children are able to obtain all essential nutrients for normal growth and development from a carefully planned vegetarian diet. Extra care is needed for these children as they may be at risk of inadequate intakes of energy, protein, calcium, iron, zinc, vitamin B12 and omega-3 fatty acids if diet is not carefully planned and closely monitored. It is therefore important to give vegetarian children a wide variety of meat alternatives and include food from all four food groups.

IRON	ZINC	OMEGA-3 FATTY ACIDS
<p>Vegetarian children may need more dietary iron than non-vegetarians, because our bodies are better at absorbing iron from animal-based foods than plant foods.</p> <p>Helpful tips and food ideas:</p> <ul style="list-style-type: none"> • wholegrains and fortified cereals • dark-green leafy vegetables • legumes, nuts and seeds* • dried fruit • pair iron sources with fruit and vegetables, and foods high in vitamin C such as oranges and kiwifruit, to increase iron absorption. 	<p>Zinc is important for normal growth and development, as well as the immune system and cognitive function.</p> <p>Vegetarian sources include:</p> <ul style="list-style-type: none"> • wholegrains and fortified cereals • milk and cheese • legumes • nuts*, nut butters • soy products. 	<p>Long chain omega-3 fatty acids (EPA and DHA) are found in animal products such as fish/fish oils, seafood, eggs, lean red meat and omega-3 enriched foods.</p> <p>Vegetarians may eat none or little of these foods so they need to include sources of a-linolenic acid in their diet, as their bodies can then convert this into EPA and DHA.</p> <p>Plant-based sources include:</p> <ul style="list-style-type: none"> • flaxseed/flaxseed oil • Canola oil • Canola-based spreads • soybean oil • walnuts/walnut oil • chia seeds.

* If there is a known severe allergy in your centre please disregard recommendations.

In addition to reduce the risk of choking, do not give small hard foods – such as whole nuts and large seeds – until children are at least 5 years old.

Vitamin B12 is only naturally found in animal-based foods (meat, fish, chicken, and milk/milk products). Having an adequate intake of vitamin B12 can be an issue for vegetarians, especially vegans. Lacto and lacto-ovo vegetarian sources of B12 include milk and milk products, as well as eggs. There may also be plant foods fortified with vitamin B12 which may be suitable for vegans. Since dietary sources are limited for vegetarians and vegans, a vitamin B12 supplement may be needed.



eat some healthy oils, nuts & seeds

This food group contains vegetable oils, nuts, seeds, avocado, olives and spreads based on these foods.

Nuts, seeds, avocado, olives and healthy oils (other than palm and coconut oil), contain heart-healthy, poly and monounsaturated fats. They are a better choice than foods high in animal fats such as butter, cream and meat fats. Polyunsaturated fats are essential nutrients, so it is important to regularly choose some foods rich in these fats. Foods rich in polyunsaturated and monounsaturated fats help to reduce harmful LDL-cholesterol in the blood.

What do you mean by healthy oils?

Not all oils are created equal. Palm oil and coconut oil contain high levels of saturated fat which can increase your risk of heart disease. While these oils are better for your heart when compared to butter, there are far better plant oils for your heart, such as olive oil.

Unrefined oils, or those which are called 'cold-pressed' or 'extra virgin', have undergone very little processing. Therefore these oils have higher levels of many beneficial compounds, such as antioxidants.



Nuts and seeds

Plain (unsalted, without sugar added) nuts and seeds contain healthy unsaturated fats and are a heart healthy food.*



- ✓ Nuts and edible seeds are good sources of mono and polyunsaturated fats. These types of fats help to protect you from heart disease.

Handy
hints

* Nuts and seeds are potential choking hazards for younger children and are not recommended. Please see choking section, page 17.

UNDER FIVES AND CHOKING

Children under five are at increased risk of choking due to their narrow oesophagus and airways. They are still learning to move food around and chew, as well as learning to swallow.

There are things you can do to reduce their risk of choking.

- Always make sure that your children sit down while they eat and that they are supervised by an adult while they are eating or drinking.
- Offer foods that match their chewing and grinding ability.



Be aware of foods which are more likely to cause choking:

- **small hard foods** that are difficult for children to bite or chew (eg. nuts, large seeds, popcorn husks, raw carrot, apple, celery)
- **small round foods** that can get stuck in children's throats (eg. grapes, berries, raisins, sultanas, peas, watermelon seeds, lollies)
- **foods with skins or leaves** that are difficult to chew (eg. sausages, chicken, lettuce, nectarines)
- **compressible food** which can squash into the shape of a child's throat and get stuck there (eg. hot dogs, sausages, pieces of cooked meat, popcorn)
- **thick pastes** that can get stuck in children's throats (eg. chocolate spreads, peanut butter)
- **fibrous or stringy foods** that are difficult for children to chew (celery, rhubarb, raw pineapple).

You can reduce choking risk by:

- **altering the food texture:** grate, cook, finely chop or mash
- **removing the high-risk parts** of the food: peel off the skin or remove the strong fibres
- **avoid giving small hard foods**, such as nuts and large seeds, until children are at least five years old.

FUSSY EATERS

Establishing good eating behaviours in childhood is important for growth and development. It is common for children to go through phases where they are hesitant or refuse new foods and this can often be associated with increasing independence. Don't be discouraged and gently keep offering new foods. It can take up to 15 tries before a new food is accepted.

Common concerns:

- refusal to sit at the table
- resistance
- tantrums
- getting up from the table
- delay tactics – taking an excessive amount of time to eat (ie. more than 15 minutes for snacks and 30 minutes for main meals)
- very selective of foods
- refuses new foods
- only eats 'processed' food.

- ✓ Children are more likely to accept foods due to positive peer influences and role modelling – set good examples and try different foods with your child.
- ✓ Create a relaxed and happy environment that positively enforces healthy eating and eat together at the table. Make sure to sit with children and have encouraging conversations about healthy foods.
- ✓ Introduce new foods when you know your child will be hungry and alongside familiar foods.
- ✓ Present a new food with a favourite or accepted food.
- ✓ Praise good eating behaviours and don't fuss when they refuse food.
- ✓ Make food easy and fun to eat:
 - finger foods
 - include a variety of colours and textures
 - present food in different shapes
 - small portions – they can always ask for more
 - include more than one flavour
 - create imaginative names for foods – call broccoli “trees”.

When to ask for more help

- ✓ Restricted range or variety: eats less than 20 foods
- ✓ Foods lost from diet are not reacquired
- ✓ Oral-motor delay
- ✓ History of choking
- ✓ Aversion of all food in a specific texture or food group
- ✓ Eats different foods to family, often eats alone

If you are concerned, it is best to discuss with the child's whānau and suggest seeking professional advice such as GP or Well child/Tamariki Ora provider for more information.



FOOD ALLERGY

Food allergy is a common condition in early childhood, with up to one in ten (10%) of children under the age of 5 likely to be affected. Food allergy is caused by the immune system mistaking protein in a particular food as a threat to the body, and causing an allergic reaction to block the protein's pathway through the body.

The main foods which cause food allergies in New Zealand are cow's milk (dairy), eggs, peanuts, tree-nuts, soy, wheat, fish and shellfish. However, almost any food can cause a food allergy. There is no cure, although most children will outgrow their milk (dairy) and egg allergies by adolescence, many by 5 years of age. Allergies to peanuts, tree-nuts, fish and shellfish tend to persist for life and are the main food allergies in adults.

There is some evidence that early introduction of food allergens, particularly egg and peanut, can help reduce the risk of developing allergy to these foods. Guidelines recommended for New Zealand by the Paediatric Allergy Clinical Network¹ are those on 'Infant Feeding and Allergy Prevention' published by the Australasian Society of Clinical Immunology and Allergy (ASCIa). These can be found on allergy.org.au and are based on currently-available evidence for food allergy prevention. While aimed at high risk infants (those with a family history of allergies or with severe eczema and/or existing food allergy), they can be used for all babies.

Key points in the ASCIa Guidelines

- When introducing foods to your baby, include those which may cause an allergy, within the first 12 months of life. Studies show that this may reduce the chance of your baby developing a food allergy.
- Start to introduce solid foods when your baby is ready – around 6 months, but not before 4 months.
- If possible continue to breastfeed your baby while you are introducing solid foods.
- Include cow's milk, egg, peanut, tree-nuts, soy, sesame, wheat, fish and other seafood.
- Once introduced, continue to regularly include these foods in your baby's diet.

This advice is based on evidence, including research in babies with severe eczema and egg allergy. Unfortunately, some babies may still develop a food allergy despite following this guide. If your baby has an allergic reaction, stop giving that food and seek medical advice.

For further information on how to introduce solids including allergenic foods to infants, go to: **allergy.org.nz**

Allergic reactions happen quickly – usually within minutes of ingesting (eating or drinking) the food and rarely beyond two hours. Symptoms, which range from mild to severe and life-threatening (anaphylaxis), include hives or welts, swelling of the face, lips and/or eyes, vomiting and abdominal pain. Signs of anaphylaxis are those which indicate breathing difficulties, such as difficult/noisy breathing, or indicate the circulation is affected – young children, for example, may become pale and floppy.

Anaphylaxis is a medical emergency and must be treated urgently – dial 111 for an ambulance.

It is not recommended parents delay introduction of a food or remove food from a baby's diet, including elimination from the breastfeeding mother's diet, because they are concerned it may be causing eczema, colic, or rhinitis (stuffy, runny nose). Delaying the introduction increases the risk of developing an allergy to that food. The child's growth and development may also be affected because of poor nutrition due to a restricted diet.

Parents should discuss concerns with the child's doctor. Children with food allergy are recommended to have the advice and support of a dietitian.

Links to further information and resources:

Allergy New Zealand: allergy.org.nz



MYTHS

Are muesli bars really a healthy option?

Muesli bars are best kept for an occasional treat, rather than as a staple snack food. There are many varieties of muesli bars for sale, many containing high amounts of saturated fat, sugar and salt. It is best to choose a bar low in saturated fat rather than total fat. Additionally, their sticky nature may result in acceleration of tooth decay by sticking to children's teeth for prolonged periods of time. It is important to choose bars that are nutritious and come in small serving sizes. Better snack options include whole and less-processed foods such as fruit, vegetable sticks with hummus, boiled eggs, unsweetened yoghurt, nuts and seeds etc.



Just a note on sugar:

The World Health Organization defines free sugars as:

"Sugars added to foods and beverages by the manufacturer, cook or consumer. It also includes sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates."

Free sugar in foods or drinks adds extra calories to food but no nutrients. It's easy to have too much because it doesn't satisfy hunger. Based on the evidence about the detrimental impact of a high-sugar diet, the World Health Organization (WHO) recommends people should reduce their intakes of 'free sugars' to around 5 per cent of total energy, to gain health benefits. This equates to about six teaspoons for adults and five teaspoons for children.

Foods described above are very high in free or added sugars so it is recommended to limit these.

Natural (or 'intrinsic') sugars are the naturally occurring sugars found in whole, unprocessed foods such as fruits, vegetables, dairy, honey and some grains. However, just because a sugar is 'natural' doesn't always make it a healthy choice. The World Health Organization classifies natural sugars such as honey, syrups, fruit juices and fruit juice concentrates as 'free sugars' – the ones we should limit in our diet. These foods are high in kilojoules and provide few vital nutrients and typically little fibre.

Remember there are naturally occurring sugars in nutritious foods, like fruit and plain milk and yoghurt, which do not have the same effect as free sugar. We encourage people to include these as part of a healthy eating pattern.

What about the Paleo diet for my children?

Young children are growing and developing at a rapid pace. They need more energy, protein, vitamins and minerals than older children and adults.

The most common Paleo diet excludes dairy, grains, legumes. This is not recommended as it excludes two main food groups and energy sources from a healthy diet. It is not necessary to resort to extremes to achieve a healthy way of eating. The Heart Foundation and Ministry of Health recommend legumes, unrefined whole grains, and plain reduced-fat dairy as part of a healthy diet; alongside seafood, lean meats, and healthy sources of fats like oily fish, nuts, seeds, plant oils and avocado.

However some positive features can be taken from Paleo including; the strong focus on excluding processed foods and sugar, and eating more vegetables and whole foods. Always remember when making eating pattern changes, do so in a sustainable way suiting individual nutritional needs, budget, cooking skills, taste preferences and lifestyle.



Is coconut oil healthy?

Coconut oil has high levels of saturated fat. The Heart Foundation's position statement on coconut oil recommends only occasional use of coconut oil.

- It is not recommended as the main oil of choice.
- While it is a better choice than butter, based on current evidence it is not advisable to switch from unsaturated plant oils (such as olive, avocado or Canola oil) to coconut oil.
- The claims made on coconut oil are based on lauric fatty acid, which is claimed as a medium-chain fatty acid; however it acts as a long-chain fatty acid in our bodies.

Which spread is best: Butter vs Margarine?

Butter and margarine both contain the same amounts of fat; however the types of fat differs. Butter contains saturated fat. Butter is the biggest source of saturated fat in the Kiwi diet. In comparison margarine is a source of unsaturated fat. A heart-healthy diet recommends replacing saturated fats with unsaturated fats. One way to do this is to switch from butter to oil-based spreads.

- Spread thinly, if you can taste it you are using too much.
Also a good cost saving measure.
- Consider avocado, hummus and nut or seed butters as good options for a less-processed, more whole-food approach, or use no spread at all.
- Oil-based spreads and margarine are not one molecule away from plastic – they have a similar chemical structure, but the same could be said for butter!



DEVELOPMENTAL AGES AND STAGES

First foods

It is important to encourage breastfeeding exclusively for the first 6 months of baby's life and into the second year. A supportive environment for feeding mums within your centre is important.

Infants, especially under 3 months, have considerable energy needs: 35% energy intake is for growth. Energy proportions change as baby becomes more active, and as baby grows and is ready for solids, some nutrients such as iron become very important. Up to 6 months babies get all their essential nutrients from breastmilk or formula, but beyond this point babies will need additional nutritional support and will be ready for the introduction of solid foods. It is important still however to offer baby breast milk or formula before solids up to 8-9 months of age.

Baby will show signs of readiness by:

- Holding their head up and sitting well
- Showing an interest in food
- Making chewing movements with their mouth, especially when watching family members eat
- Open their mouth when a utensil reaches their mouth
- Keeps food happily in their mouth, and is able to swallow safely.

Baby is **NOT** ready if*:

- They turn their head away
- Pushes food away
- Spits out food
- Closes mouth.

*These are also signs when baby is older that they have had enough to eat.



Around 6 months:

- Breast milk or formula first
- Foods are soft, **plain and pureed to a smooth consistency**

Food ideas: iron-fortified baby cereal, well cooked meat (very well pureed), fruit without skin or pips, root vegetables, cooked rice.



Around 7-8 months:

- Breast milk or formula still offered first
- Baby can now have **mashed foods** and some finger foods
- In addition to current foods, legumes, eggs, (well cooked), soft cheese, plain yoghurt
- Finger foods such as, ripe banana, cooked vegetables, toast fingers, cheese sticks.



Between 8-12 months

- **Solids can now be offered before breast milk or formula**
- Baby can now have lumpy foods and should be able to bite and chew well
- Baby can now start having mashed versions of adult dinners such as cottage pie, fish pie etc.
- Finely chopped, well cooked meat, egg, seafood, poultry can be introduced as well as cooked chopped noodles and pasta
- Soft breakfast cereals and firmer finger foods such as grated fruits, crispbread and kiwifruit can be eaten.



Section 3

Menu planning

Good nutrition during childhood is essential for growth, development and general health.

Menu planning ensures that children's needs are met and food provided is within budget.

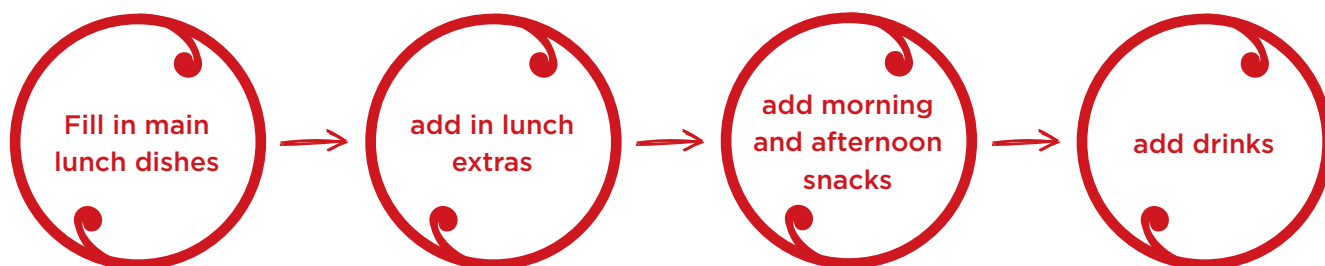
Many children spend at least 8 hours a day at an early learning service so menus should provide the nutrients needed for activity, development and learning, as well as a variety of tastes and textures. Through providing a varied and balanced menu, we are able to positively influence children's consumption and attitudes towards foods.

As well as tastes, textures and nutrients, a planned menu accounting for allergies and cultural/religious needs is also important. In addition, having your menu planned is a great way of keeping parents informed about what foods their children have eaten and tried.

Some important points to consider when planning a menu:

- Providing a menu with a 4-week cycle is best practice as it offers range and variety
- Menu should be based on the food groups
- Children at a centre for 8 hours should be provided with at least $\frac{1}{2}$ of their daily requirements from each of the 4 food groups
- When planning your menu it is a good idea to think about your snacks as well as main meals incorporating all of the food groups.

It can be useful to follow this 4-step process when planning a menu:



For more menu-planning tools and support visit fuelled4life.org.nz

For more information on the Healthy Heart Award visit learnbyheart.org.nz



Sample menu for ages 7-8 months



By 7-8 months baby is able to start trying thicker consistency foods with lumps and finger foods. **Still offer breast milk or formula before meals.** Baby can hold food in his/her hand easily but it MUST still be soft and easy to eat.

New foods can be offered every few days; the menu below is a guide for ideas only. Not every infant will accept new foods straight away, remember it can take lots of trials for baby to develop a taste for something.

Water only should be offered as a drink in addition to breast milk. Cow's milk is not suitable as a drink for babies under 12 months.

	MONDAY <i>Rāhina</i>	TUESDAY <i>Rātu</i>	WEDNESDAY <i>Rāapa</i>	THURSDAY <i>Rāpare</i>	FRIDAY <i>Rāmere</i>
Morning tea <i>Kai ō te ata</i>	Grated cheese strings with sliced banana pieces	Eggy* bread sticks with banana slices	Plain yoghurt with mashed stewed apple and mango	Cooked carrot sticks, cauliflower florets and cheese fingers	Custard with peach and apricot mash
Lunch <i>Kai ō te tina</i>	White fish, potato and spinach puree	Broccoli, beef kumara and rice puree	Cauliflower, pumpkin and chicken mash	Iron-fortified baby rice with apple and ripe banana mash	Mince Bolognese (blitzed mince, tomatoes, carrots, spinach and pasta)
Drinks <i>Ngā Inu</i>	Water	Water	Water	Water	Water

*Discuss possible allergens with family before egg introduction.

- All of these recipes can be used for older babies also, just alter the consistency for age/stage.
- All recipes given can be portioned out into ice cube trays and frozen for later use. Should be discarded after 1 month.

Sample menu for ages 8-12 months



Around this age, baby may show more interest in food and want to eat what everybody else is eating. They can now have their solid food first and offer breast milk or formula after. You can try introducing different textures and offering more finger food options.




You can offer seafood, peanut butter and small amounts of spices at this age. Hummus and other spreads can be used as a safe alternative. **Discuss possible allergens with family before shellfish and peanut introduction. Choose white or fine wholemeal bread.**

Choking is still a risk at this age, especially since baby is more mobile and trying new foods. Always stay with them during meals.

	MONDAY <i>Rāhina</i>	TUESDAY <i>Rātu</i>	WEDNESDAY <i>Rāapa</i>	THURSDAY <i>Rāpare</i>	FRIDAY <i>Rāmere</i>
Morning tea <i>Kai ō te ata</i>	Iron-fortified baby porridge with breast milk or formula and mashed fruit	Fruit bread fingers kiwifruit slices	Custard with berry compote	Soft cooked veggies (carrots, cauliflower, broccoli) with plain hummus	Scrambled eggs with zucchini and carrot grated in
Drink <i>Ngā Inu</i>	Water	Milk	Milk	Milk	Water
Lunch <i>Kai ō te tina</i>	Mini peanut butter sandwiches with ripe pear, banana, and cheese slices	Shepherd's pie with mushroom, courgette and carrot	Fish pie with soft cooked cauliflower	Beef casserole mashed with lumpy consistency	Chicken, corn, carrot and risoni dish
Drink <i>Ngā Inu</i>	Breast milk or formula	Breast milk or formula	Breast milk or formula	Breast milk or formula	Breast milk or formula
Afternoon tea <i>Kai ō te ahiahi</i>	Corn and cheese roll ups Fruit	Courgette fritters with yoghurt dip	Toast fingers with marmite and avocado Fruit	Plain yoghurt with stewed fruit	Mini fruit pikelet with banana slices
Drink <i>Ngā Inu</i>	Water		Water	Water	Water

Summer sample menu

This menu meets the Pā-Harakeke criteria for the Healthy Heart Award

	MONDAY <i>Rāhina</i>	TUESDAY <i>Rātu</i>	WEDNESDAY <i>Rāapa</i>	THURSDAY <i>Rāpare</i>	FRIDAY <i>Rāmere</i>
Morning tea <i>Kai ō te ata</i>	Lentil fritters Fruit 	Corn on the cob Fruit 	Veggie rice paper rolls Fruit kebabs	Corn thin crackers and beetroot dip Fruit	Plain yoghurt Fruit kebabs
Drink <i>Ngā Inu</i>	Water	Milk	Milk	Water	Water
Lunch <i>Kai ō te tina</i>	Wholemeal pita pockets, mince and kidney beans Grated carrot and cheese, lettuce, cucumber	Bean booster on brown rice Steamed cauliflower	Beef burgers Fresh lettuce, cucumber, cheese and tomato	Chicken and cheese quesadillas with carrot and celery sticks	Tuna kedgeree Seasonal vegetables 
Drink <i>Ngā Inu</i>	Water	Water	Water	Water	Water
Afternoon tea <i>Kai ō te ahiahi</i>	Banana "ice cream"	Munch and crunch platter	Smoothies Fruit toast	Banana and oat cookies	Courgette fritters Fruit
Drink <i>Ngā Inu</i>	Milk	Water	Water	Milk	Milk



FUELLED4LIFE

Fuelled4life is the brand name for the Food and Beverage Classification System (FBCS) managed by the Heart Foundation. It is a collaborative initiative that involves the education, health and food industry sectors working together to make it easier for schools and early learning services to provide healthier food.

Fuelled4life is a free practical tool. Foods and beverages are classified according to their nutrient profile with the system identifying the healthier options. Foods and beverages are divided into two levels: everyday and sometimes.



Everyday foods

Everyday foods and drinks are from the four main food groups. These foods and drinks are the healthiest choices. Encourage and promote everyday foods and drinks by ensuring most of the menu is made up of these.



Sometimes foods

Sometimes foods and drinks are higher in energy, saturated fat, sugar and salt so should be eaten in moderation. These foods and drinks should not dominate the food choices available.

Fuelled4life provides nutritious recipes, tips and resources to support all areas of food provision including menu planning, help with lunch boxes, celebrations and catering advice. It also offers individualised nutritional support and advice to food preparers and external food suppliers to help them make healthier foods for children.

For more information, visit fuelled4life.org.nz

NUTRITIOUS MENU AND RECIPE IDEAS

Healthy Lunch Box ideas: nga-tauira kai

- Cut large seasonal fruit and vegetables into smaller pieces and include a savoury dip, eg. hummus, pesto, tomato salsa
- Use seasonal vegetables to make mini frittatas or fritters
- Add lemon juice to cut up fruit (apples and pears) to stop them from browning.
- Involve children in lunchbox choices and preparation.
- Be a role model – prepare your own healthy lunch at the same time
- Avoid soggy sandwiches – keep bread and fillings separate so your child can create their own at school.
- Try different breads, eg. wraps, pita bread, corn thins, rice wafers, fruit bread, muffin splits or rēwena bread.
- Cut sandwiches into different shapes using a biscuit cutter or knife.
- Use leftovers such as roast veggies, cold meats, rice or pasta.
- Prepare items in bulk and keep in the freezer until you need them, eg. mini pizzas, mouse traps or frittata.
- Freeze a drink bottle for the lunchbox to keep the food cold and safe.



LOADING UP THE LUNCHBOX

Ngā Kai tika ō te tina

For 2-5 year olds

Children need a variety of healthy food to learn and grow.

Try to choose foods from each of the four groups below, every day.

Vegetables and fruit



Banana



Cucumber



Mandarin



Cooked leftover vegetable



Cooked or stewed apple



Kiwifruit



Cooked or grated carrot



Chopped tomato



Diced capsicum



Tinned fruit

Milk, yoghurt and cheese



Cottage cheese



Yoghurt



Grated cheese



Reduced fat milk



Custard

Grain food and starchy vegetables (wholemeal/wholegrain)



Wraps



Sandwiches



Mini pizza



Leftovers



Rice Ball



Roti/chapatti



Couscous



Crackers



Kumara



Water

Legumes, fish, seafood, eggs, poultry and meat



Tuna



Finely chopped chicken



Chickpea/lentil curry



Baked beans



Boiled egg



Hummus

Children can choke on food at any age but the risk is higher in children under 5 years. Refer to the Ministry of Health Guidelines to find out more.
Search 'food and choking' at health.govt.nz Check with your ECE service if there are any allergy restrictions.

Section 4

MEAL IDEAS



Fresh rice paper spring rolls Serves 4

Vietnamese rice paper rolls make a tasty starter or light snack



Ingredients

2 tsp fish sauce
1 tbsp sweet chilli sauce
3 tbsp lime juice
3 tbsp bunch coriander leaves
1 short cucumber
1 avocado, large
2 carrot, medium
1 red capsicum, large, deseeded
16 rice paper sheets
100 g chicken cooked shredded
or prawns

Method

1. Mix together the fish sauce, sweet chilli sauce, coriander leaves and lime juice in a shallow bowl.
2. Cut cucumber, capsicum and carrot into long thin strips. Cut avocado into half, then into quarters. Cut each quarter in four pieces. Place cucumber and avocado into the fish sauce mix and leave to marinade whilst preparing the rolls. If using chicken, also add it to the fish sauce mix.
3. Soak 1 sheet of rice paper in warm water. Once softened (about 1 minute) remove from the water and place flat on a tea towel. (Alternatively dip each sheet in cold water and lay out on the bench. By the time you roll them, they should have softened).
4. Place 2-3 coriander leaves, carrot, cucumber, capsicum and avocado in the middle top-half of the rice paper. Fold the bottom half of the rice paper up to make an envelope around the filling. Fold in one side of the envelope and roll up tightly.

Per serve:

ENERGY	TOTAL FAT	SATURATED FAT	TOTAL CARB	DIETARY FIBRE	SODIUM
1092kj	11g	1.8g	36g	4.4g	404mg



Spicy red lentil soup Serves 4

A delicious healthy soup recipe to have for lunch or dinner.



Ingredients

4 cloves garlic
 2 tbsp tomato paste, reduced-salt
 4 tsp coconut, desiccated
 4 tbsp curry powder
 2 tsp cumin seeds
 2 tsp mustard seeds
 2 tsp coriander seeds
 2 brown onions, chopped
 1 L vegetable stock, reduced-salt
 1 L boiling water
 800 g diced tomatoes
 ½ cup McKenzie's Pearl Barley, washed
 1⅔ cups McKenzie's Red Lentils, rinsed
 120 ml coconut cream, reduced-fat
 coriander leaves, chopped
 Fresh basil, for garnish

Method

1. In a food processor, mince garlic, tomato paste, coconut, curry powder, and seeds to make a paste.
2. Heat oil in a large saucepan over a medium-high heat. Add onion and cook stirring for 3-4 minutes until softened. Add paste and cook for another minute.
3. Stir in stock, water, tomatoes and barley. Cover and bring to the boil. Reduce heat to low and simmer for 20 minutes.
4. Add red lentils and simmer covered for 25 minutes or until barley is tender. Add more water if the soup appears to be too thick.
5. Stir in coconut cream and then divide between bowls. Top with chopped coriander and fresh basil if desired.

Per serve:

ENERGY	TOTAL FAT	TOTAL CARB	DIETARY FIBRE	SODIUM
2359kj	4.9g	78g	14.2g	442mg



Easy eggplant bake Serves 10



Ingredients

1.5 kg eggplant
 Canola oil spray
 200 g lean beef mince
 1 onion, diced
 2 cups finely diced vegetables
 (eg. broccoli stalks, carrot, capsicum,
 cauliflower stalk)
 2 x 400 g can tomatoes
 1 tbsp tomato paste
 1 cup water
 1 x 400 g can lentils, rinsed and drained
 ½ tsp black pepper
 1 cup chopped Italian parsley plus extra
 to garnish

Method

1. Preheat oven to 180°C.
2. Slice eggplant into 1 cm thick rounds and spray with Canola oil. Bake for 20 minutes or until golden.
3. In a large pan, fry mince until brown.
4. Add onion and cook until tender.
5. Add chopped vegetables to the pan, cook for 2 minutes.
6. Add canned tomatoes, tomato paste, and water. Simmer for 20 minutes.
7. Stir through the legumes, pepper and parsley.
8. Spread meat sauce on bottom of oven proof dish then top with eggplant rounds. Continue to layer, finishing with meat sauce.
9. Bake for 20 minutes.
10. Garnish with chopped parsley.

Approx. \$1.94 per serve

Use chickpeas or kidney beans in place of lentils.

TIP





Courgette fritters Serves 8

A tasty idea to increase your children's vegetable intake!



Ingredients

2 eggs
 $\frac{1}{3}$ cup wholemeal flour
 $\frac{1}{3}$ tsp baking powder
 $\frac{1}{4}$ cup low-fat milk
1 cup courgette, grated

Method

1. Beat the eggs and milk.
2. Stir in the flour, baking powder and courgette.
3. Heat a small amount of vegetable oil in the frying pan.
4. When the mixture bubbles on top, turn over with a fish slice or tongs.
5. Cook on the other side until golden brown.

Approx. \$0.27 per serve

TIP

- ✓ Use frozen corn instead of tinned corn or a mixture of courgette and corn.
- ✓ Add cooked chopped mussels for mussel fritters.
- ✓ Try 2 cups of grated potato or kumara or 425g can of whole kernel corn.
- ✓ Make extra and freeze.



Pork hot dogs Serves 4 adults or 8 children

Here is a transformed version of the popular hot dog. They are sure to please children of all ages. Serve one for a child and two for an adult.



Ingredients

350 g trim pork mince
1 clove garlic, crushed
1 egg
1 tbsp lemon juice
1 medium carrot, grated
6 dried dates, finely chopped
½ cup dry breadcrumbs
1 tbsp fresh herbs, chopped
1 tsp ground cumin
1 tsp ground coriander

Method

1. Heat oven to 200°C.
2. Mix together all of the ingredients in a large bowl and knead until slightly sticky.
3. Divide into approximately 75g portions, there should be two hot dogs for each adult portion.
4. Using your hands mould into sausage shapes.
5. Insert an ice block stick into each sausage.
6. Heat a non-stick frying pan and brown the outside of each hot dog.
7. Once browned place on a baking tray and cook in oven for approximately 10 minutes or until cooked through.

Per serve:

ENERGY	TOTAL FAT	SATURATED FAT	TOTAL CARB	SUGARS	DIETARY FIBRE	SODIUM
974kj	8.4g	3.1g	17.1g	6.5g	1.6g	225mg



Homemade pasta sauce Serves 2

This tasty homemade pasta sauce is perfect for dinner.



Ingredients

1 onion, diced
400 g can tomatoes, crushed
1 clove garlic, crushed
2 tbsp tomato paste, reduced-salt
½ tsp chilli

Method

1. Cook onion in a non-stick pan with a dash of water until soft.
2. Add crushed tomatoes, garlic, tomato paste and chilli and cook until thickened.

TIP

- ✓ When in season use fresh chopped cooked tomatoes as a base.
- ✓ Add in cooked leftover vegetables such as carrots, zucchini, and capsicums and puree to “vege up” the recipes.
- ✓ Add in fresh or packet herbs such as rosemary, thyme, sage and oregano to add flavour.

Per serve:

ENERGY	TOTAL FAT	TOTAL CARB	DIETARY FIBRE	SODIUM
280kj	0.5g	12g	3.2g	234mg



Cauliflower and chickpea curry

Serves 6

This is an easy curry to make and you can easily substitute any of the vegetables for ones you have available.



Ingredients

1 tsp vegetable oil
 ½ medium onion, diced
 2 cloves garlic, crushed
 2 tbsp curry powder
 165 ml low-fat coconut milk
 1 cup water
 1 medium carrots, peeled and sliced
 2 cups butternut pumpkin, peeled and diced
 ½ head cauliflower florets
 2 cups peas
 1 can chickpeas, drained and rinsed
 375 ml light evaporated milk
 1 tbsp lemon juice
 ¼ cup fresh coriander, chopped

Method

1. Gently saute the diced onion with the Canola oil until soft and lightly browned.
2. Add garlic and curry powder.
3. Add water and coconut milk.
4. Bring to the boil then reduce to a gentle simmer. Add carrot, pumpkin and cauliflower.
6. Cook until just about cooked.
7. Add peas and chickpeas. Cook for a further 5 minutes.
9. Remove from heat.
10. Heat evaporated milk in a separate pot until hot but not boiling.
11. Add hot evaporated milk to curry.
12. Garnish with lemon juice and coriander, don't mix it through.
13. This curry is best served with steamed brown rice.

Per serve:

ENERGY	TOTAL FAT	SATURATED FAT	TOTAL CARB	SUGARS	SODIUM
836kj	4.7g	2.2g	22.5g	13.7g	197mg



Salmon and potato cakes

Serves 4 adults or 8 children

These can be made ahead of time and kept in the fridge for a quick meal or put into lunch boxes. Serve two per portion for an adult or one for a child.



Ingredients

300 g potatoes
100 g canned salmon, drained
1 egg
¼ cup dry breadcrumbs
1 spring onion, chopped
1 ½ gherkins, finely chopped
1 tsp lemon zest, finely chopped
½ tsp mustard
2 tbsp fresh herbs, finely chopped
1 tbsp vegetable oil

Method

1. Peel and boil potatoes until a fork comes out easily when inserted.
2. Mash potatoes and allow to cool.
3. Add remaining ingredients except oil.
4. Form into round patties.
5. Heat a large frying pan with oil and brown patties on each side.
6. Serve warm or refrigerate for later use.

Per serve:

ENERGY	TOTAL FAT	SATURATED FAT	TOTAL CARB	SUGARS	DIETARY FIBRE	SODIUM
473kj	3g	0.8g	14.6g	2.7g	1g	224mg



Chicken, capsicum and avocado burrito Serves 4



These burritos make a great lunch or light meal. The tortillas are easy to make and keep well frozen. You can use the tortillas for any recipe that calls for a wrap.

Ingredients

6 tortillas
285 g chicken thigh fillets, skinless, sliced
1 tsp ground paprika
1 tsp ground cumin
2 tsp vegetable oil
1½ tbsp lemon juice
1½ capsicum, sliced
½ cup yoghurt, unsweetened, reduced-fat
2 cups salad leaves
1 avocado

Method

1. Marinate the chicken with paprika, cumin, oil and lemon juice for 2 hours or overnight.
2. Heat a large heavy-base frying pan over high heat.
3. Add marinated chicken and sliced capsicum, cook stirring often until chicken is cooked through and capsicum softened.
4. Spread yoghurt over wraps.
5. Place salad leaves on yoghurt.
6. Top with avocado slices and warm chicken and capsicum mix.
7. Roll up and serve.

Per serve:

ENERGY	TOTAL FAT	SATURATED FAT	TOTAL CARB	SUGARS	DIETARY FIBRE	SODIUM
1611kj	19g	3.6g	30g	6g	7.7g	91mg



Audrey's sapa sui - chop suey

Serves 10

Heart Foundation Heart Health Advocate Audrey Tolua's healthy version of sapa sui.



Ingredients

3 packets vermicelli
 1½ kg lean beef, chopped into small pieces
 1 tbsp peanut oil
 4 garlic cloves, peeled and crushed
 2 tbsp ginger, freshly grated
 2 red peppers or carrots, finely chopped
 2 cups broccoli, cut into bite-sized pieces
 1 cup beans, fresh or frozen, sliced
 ½ cup soy sauce, reduced-salt

Method

1. Place the vermicelli in a large bowl and just cover with hot water. Soak for 15 minutes or until it has expanded.
2. Heat the oil in a large pot and add the garlic, ginger and beef.
3. Cook until the meat is nearly done.
4. Add the vermicelli and up to ½ cup of the water it has been soaking in.
5. Lastly add all the vegetables, soy sauce and simmer for a couple of minutes.

TIP

- ✓ Be careful not to stir too much or the vermicelli goes mushy!
- ✓ If you don't have peanut oil, use whatever oil you have on hand.

Per serve:

ENERGY	SATURATED FAT	TOTAL CARB	DIETARY FIBRE	SODIUM
1517kJ	2.4g	42.2g	3.4g	307mg



Simple sweet and sour pork Serves 4

This is a classic sweet and sour pork recipe. Although you could easily substitute chicken, fish or beef for the pork.



Ingredients

SWEET AND SOUR SAUCE

425 g pineapple pieces in juice

2 tsp soy sauce

1½ tbsp vinegar

1½ tbsp tomato sauce

2 tsp brown sugar

1 tsp fresh ginger, grated (optional)

1 tbsp cornflour

STIR FRY

1 tbsp vegetable oil

500 g lean pork, sliced thinly

1 onion, sliced

½ capsicum, chopped

2 carrots, peeled and sliced

½ broccoli, cut into florets

2 cups cabbage, shredded

Method

SWEET AND SOUR SAUCE

1. Place canned pineapple with juice, soy sauce, vinegar, tomato sauce, brown sugar and ginger into a saucepan and bring to a simmer.
2. Wet the cornflour with a little water.
3. Slowly pour the cornflour mixture into the simmering sauce while stirring constantly until it gets to the desired thickness.

STIR FRY

1. Heat oil in a large frying pan or wok.
2. Add the pork and brown, remove from the pan and set aside.
3. Add the vegetables to the pan and cook until tender.
4. Add the pork back to the pan with the sweet and sour sauce and heat through.
5. Serve with rice.

Per serve:

ENERGY	TOTAL FAT	SATURATED FAT	TOTAL CARB	SUGARS	DIETARY FIBRE	SODIUM
522kj	3.1g	0.5g	21g	20.1g	4.4g	51mg



Macaroni cheese with white and green beans

Serves 6

Here's a re-make of a classic which has the cheese sauce thickened with pureed white beans.

Ingredients

2 cups small pasta shapes

365 g fresh or frozen green beans, chopped

1 can cooked white beans, drained and rinsed

1½ cups reduced-fat milk

1½ cups Edam cheese, grated

Method

1. Boil the pasta for approximately 10 minutes or until al dente in unsalted boiling water, drain and set aside.
2. Blanch the green beans in boiling water for 2-3 minutes or until just cooked, drain and set aside.
3. Puree the canned white beans until smooth.
4. Mix pureed beans with the milk and bring to the boil.
5. Remove from the heat and add cheese, stirring to melt.
6. When the cheese has melted mix the sauce with the cooked pasta and green beans.
7. Serve while hot.

Approx. \$1.16 per serve

White beans are also known as cannellini beans or navy beans.

TIP



Chicken fried rice Serves 10

This tasty chicken fried rice recipe is an easy and quick meal to make when you're in a hurry.



Ingredients

500 g dry rice

600 ml water

5 eggs

50 ml vegetable oil

750 g mixed frozen vegetables

200 g chicken breast, skinless, grilled

45 ml soy sauce, reduced-salt

Method

1. Rinse the rice under cold running water.
2. Combine rice and water and cook in a rice cooker.
3. Lightly beat the eggs.
4. Heat a wok or large frying pan.
5. Add half the oil.
6. Add beaten egg and cook until lightly scrambled.
7. Remove eggs and roughly chop.
8. Add the rest of the oil to the wok.
9. Add vegetables and stir-fry until nearly cooked.
10. Add cooked rice and chicken and heat through.
11. Add eggs back to wok with soy sauce.
12. Cook through and mix thoroughly.

Per serve:

ENERGY	TOTAL FAT	SATURATED FAT	TOTAL CARB	SUGARS	DIETARY FIBRE	SODIUM
1314kj	8.6g	1.6g	46.4g	3.4g	3.4g	424mg



Fish pie Serves 10

This fish pie meets the 'Everyday' criteria in the Food and Beverage Classification System. Children and adults will love it.



Ingredients

1 tsp olive oil
 1 medium onion, diced
 1 medium carrot, diced
 3 cloves garlic, crushed
 1 cup low-fat milk
 1 can kidney beans, drained and rinsed
 1 tsp paprika
 ⅔ cup frozen peas
 ½ cup frozen prawn meat, thawed and chopped
 1 fillet frozen hoki, thawed and diced
 2 tbsp fresh parsley, chopped
 2 tbsp low-fat sour cream
 2 tbsp cornflour
 1 kg cooked mashed potato

Method

1. Heat oven to 200°C.
2. Gently saute the onion and carrot with the olive oil in a large pot until soft. Add garlic and saute briefly.
3. Add milk and bring to a gentle simmer.
4. Add kidney beans, paprika, peas, prawns, hoki, parsley and sour cream.
5. Cook gently until all ingredients are just cooked.
6. Mix cornflour with a little water to form a thin paste.
7. Stir cornflour mixture into pot slowly stirring constantly until it has thickened.
8. Pour pot contents into a deep sided pie dish.
9. Carefully crumble mashed potato over fish mix.
10. Place fish pie in oven and bake for approximately 20 minutes or until it is hot through.
11. Allow to cool before serving.

Per serve:

ENERGY	TOTAL FAT	SATURATED FAT	TOTAL CARB	SUGARS	DIETARY FIBRE	SODIUM
592kj	1.7g	0.6g	21g	3.9g	4.4g	79mg



Korean noodles Serves 6

Left over noodles are great for lunch boxes the next day.



Ingredients

200 g dried Korean sweet potato noodles
 2 medium garlic cloves, finely chopped
 1 tbsp vegetable oil
 200 g beef, thinly sliced
 300-400 g thinly shredded vegetables, such as carrot, onion, spinach or celery
 6 dry shiitake mushrooms
 ½ tsp salt
 Pinch of ground black pepper
 2 tbsp sesame oil
 ¼ cup reduced-salt soy sauce
 1 tbsp packed dark brown sugar
 1 tbsp sesame seeds, toasted

Method

PREPARE THE NOODLES

1. Bring a pot of water to the boil. Add the noodles, stir to separate them and boil until cooked through. Drain in a colander and rinse under cold water until cool.
2. Using scissors, cut the noodles into 6- to 8-inch lengths.
3. Transfer the noodles to a saucepan, drizzle with 1 tbsp of sesame oil and toss to coat; set aside.

PREPARE THE VEGETABLES AND SAUCE

1. Mix the soy sauce and sugar together in a small bowl, set aside.
2. Cover the dried mushrooms with hot water and let sit until softened, at least 4 hours. Trim off the stems and slice the caps thinly.
3. Heat the vegetable oil in a frying pan over high heat. Brown the garlic and onion, then add the beef, stir until cooked through. Add carrot, spinach and prepared mushrooms, seasoned with salt and pepper. Stir to mix, let cook for about 5-8 minutes.
4. Add the prepared noodles and sauce mixture. Toss until heated through.
5. Turn the heat off and add the remaining 1 tablespoon of sesame oil and toasted sesame seeds. Toss to combine well and serve.

Approx. \$2.22 per serve

Snack Ideas



Fruit ice blocks Serves 10

Most fruits work well in this recipe, simply cook the fruit and blend it with the banana then freeze. The recipe below makes ice blocks that are approximately 75 g each.



Ingredients

375 g fresh or frozen fruit

375 g banana

Method

1. Place chosen fruit in a saucepan and cover with a lid.
2. Bring slowly to a boil then turn off and allow to cool.
3. Blend fruit with equal quantities of banana until smooth.
4. Pour into ice block moulds with a stick and freeze.

TIP

For a layered effect use different fruits and blend with banana separately then pour into moulds one after the other.

Here are some ideas for fruits to use:

- ✓ Berries – strawberries, blueberries, raspberries, blackberries
- ✓ Tropical fruits – mango, pineapple
- ✓ Stone fruit – plums, peaches, nectarines, cherries

You could also replace these fruits with canned fruits, in which case you can skip the cooking and blend with banana after draining from the can.

Per serve:

ENERGY	TOTAL FAT	SATURATED FAT	TOTAL CARB	SUGARS	DIETARY FIBRE	SODIUM
146kj	0.2g	trace	9.4g	8.4g	0.9g	trace



Parsley dip



Serves 10

Dips can be a great way to encourage children to eat more vegetables!

Ingredients

1 x 400 g can chickpeas
2 tbsp lite sour cream
2 tbsp lite mayo
water as required
2 tbsp sesame oil
½ cup parsley leaves
½ tsp finely grated lemon zest
¼ tsp ground cumin

Method

1. Blend all ingredients together.
2. Add water if necessary to get a creamy consistency.



Approx. \$0.52 per serve

Bugs on a log



Ingredients

celery sticks
cottage cheese, peanut butter, or light cream cheese
raisins

Method

1. Fill celery sticks with cottage cheese, peanut butter or light cream cheese.
2. Put raisins on top (the 'bugs on the log')



- ✓ In place of raisins try sultanas, dried cranberries or chopped dried apricots.
- ✓ In place of celery try chopped carrots.

TIP



Fruit kebabs Serves 8

A fun and colourful way to have fruit. You can use whatever is in season.



Ingredients

8 strawberries, hulled
1 orange, peeled
2 small banana, peeled
2 kiwifruit, peeled
16 purple grapes
2 tsp lemon juice
8 skewers

Method

1. Cut all large fruit into chunks or slices (let the age of the children guide the size you make them).
2. When using banana, place the lemon juice in a bowl and toss the banana pieces through to coat them. This helps prevent browning.
3. Insert all fruit onto the skewers.
4. This recipe makes 1 skewer per serve.

Approx. \$1.00 per serve

VARIATIONS

To keep to a rainbow theme, you can swap for these fruits:

- Red - watermelon, raspberries
- Orange - rockmelon, mandarin, apricot
- Yellow - pineapple, peach
- Green - green grapes, honeydew melon
- Blue/Purple - blueberries, plum



Vegetable scones Serves 25

All of the flavours in these scones means you don't even need to top them with anything!



Ingredients

1 cup flour
1 cup wholemeal flour
1 tbsp baking powder
25 g grated Edam cheese
1 cup finely chopped carrot
¼ cup finely chopped spinach or parsley
¼ onion, finely chopped
1 large or 4 cherry tomatoes, chopped
¾ cup low-fat milk

Method

MAKES 20 SCONES

1. Preheat oven to 200°C.
2. Place wholemeal flour in a bowl, sift in flour and baking powder.
3. Add cheese, chopped carrot, spinach, onion and tomatoes. Mix lightly.
4. Stir in milk and combine.
5. Turn out onto a board sprinkled with flour.
6. Pat lightly into a square, cut into squares.
7. Place on baking tray, into the oven and bake until golden (approximately 15 minutes).
8. Remove from oven and cool on tray.

Approx. \$0.11 per serve



Basic scone Serves 10

This is a great basic recipe for school canteens and early learning services – add vegetables and fruit as desired.



Ingredients

1 cup plain white flour

1 cup wholemeal flour

2 tsp baking powder

½ tsp salt

1 tbsp margarine or vegetable oil

¾ cup milk

For savoury scones

¾ cup Edam cheese, grated

1 cup vegetables, chopped

For fruit scones

1 egg

1 tsp sugar

1 cup dried fruit

Method

1. Mix the flour, baking powder and salt together.
2. Make a well in the centre and add the oil and milk.
3. Mix to form a soft dough.
4. Knead gently and roll up to form a tube.
5. Cut into evenly sized pieces.
6. Bake at 200°C in pre-heated oven for 10-15 minutes or until golden brown.

Approx. \$0.14 per serve

VARIATIONS

Savoury scone

Replace milk with water, add grated Edam cheese. Replace half the Edam cheese with parmesan cheese to give the scone a stronger flavour.

Include vegetables in recipe, eg. chopped onion, grated carrot, chopped parsley. Pepper or dry mustard will give more flavour.

Fruit scone

Add egg and sugar to recipe at Step 2.

Add dried fruit to recipe, eg. chopped dates, raisins, dried cranberries or prunes.



Semolina and pear pudding Serves 12

Milk-based snacks are different ways to include dairy on early learning service menus.



Ingredients

1 L reduced-fat milk

¾ cup fine semolina

340 ml (juice from 2 x 400 g cans of pears) pear juice

1 tsp vanilla essence

3 x 400 g pears in natural juice

Method

1. Lightly grease a ring cake tin or suitable mould for turning out the pudding.
2. Place milk, semolina and pear juice in a saucepan and stir. Heat slowly until simmering and thickened.
3. Pour into mould and allow to cool.
4. Refrigerate until cold and set, before serving.
5. To serve turn pudding out onto a plate and garnish with the pears from 3 x 400 g cans, serve each portion with a little more of the reserved juice from the cans.

Approx. \$0.78 per serve



Pikelets Serves 6

A healthy twist on a childhood favourite!

Ingredients

½ cup plain flour
 ½ cup wholemeal flour
 1 tsp baking powder
 ¼ cup sugar
 2 eggs
 ½ cup (125 ml) milk
 1 cup fruit, fresh/frozen/canned (eg. chopped apple, blueberries, diced peach)
 vegetable oil for brushing

Method

1. Sift the flours and baking powder into a bowl and make a well in the centre. Whisk together the eggs, milk and sugar.
2. Pour the wet mixture into the well and mix slowly. Gradually add the fruit.
3. Heat a large non-stick frying pan over medium heat and brush with oil. Working in batches, drop heaped teaspoons of the batter into the pan and flatten with spatula to give 5 cm circles.
4. Cook until bubbles appear on the surface, then turn and brown the other side. Transfer to a wire rack to cool.
5. You can arrange some fresh or canned fruit on top.

This recipe will make 12 pikelets, with 2 per serve.

Approx. \$0.37 per serve



Oaty carrot bites

Makes about 50

Ingredients

½ cup finely chopped dates	1 tsp cinnamon
3 carrots, peeled and grated	½ tsp finely chopped ginger
1 tbsp canola oil	¼ cup desiccated coconut for coating (or more if needed)
1½ cups rolled oats	
½ cup ground almonds (or use an extra ½ cup of rolled oats)	

Method

1. In a small bowl, just cover chopped dates with hot water and soak for 10 minutes to soften, then drain the water off.
2. Add carrots, oil, oats, ground almonds, cinnamon, ginger and soaked dates to a food processor. Blitz until combined and mixture has come together. If the mixture is very wet and sticky, add more oats.
3. Roll mixture into balls a heaped teaspoon at a time and coat with a small amount of coconut. Place in the fridge for at least 2 hours.
4. Store in the fridge and eat within 5 days.



Frittata muffins Serves 8

These handy-sized frittatas cook quickly and make for easy serving.

Ingredients

Oil for spraying
4 eggs
½ cup lite milk
½ cup Edam cheese, grated
1 x 410 g can corn kernels, drained
100 g tomato, chopped
1 spring onion, chopped
1 cup mushroom, chopped
2 cloves garlic

Method

1. Spray muffin tins with oil spray. Preheat oven to 180°C.
2. Whisk the eggs and milk in a large bowl to blend well.
3. Stir in the cheese, corn, tomato, mushroom, spring onion and garlic.
4. Fill prepared muffin cups with the egg mixture.
5. Bake for about 8-10 minutes or until the egg mixture puffs and is just set in the centre.

Approx. \$0.81 per serve

Fruit jelly cups



Serves 6

Try making these quick and easy fruit jelly cups that meet the sometimes criteria with your children this summer.

Ingredients

100 ml hot water
3-4 tsp gelatine
350 ml fruit juice, no added sugar
2 cups assorted fruit or berries (chopped)
6 serving cups

Method

1. Pour 100ml of hot water into a container and add the gelatine.
2. Stir with a fork until dissolved.
3. Add the fruit juice, stir well.
4. Divide the chopped fruit into the serving cups, and pour the gelatine mixture into the cups.
5. Refrigerate for at least 2 hours or until set.

Approx. \$0.62 per serve



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Appendix 1

TE WHĀRIKI – EARLY CHILDHOOD CURRICULUM

WELLBEING – Children experience an environment where their health is promoted.

GOAL 1

Understanding their body parts and their functions

- Looking after their body
- Introducing utensils when serving and eating food
- Self-feeding
- Helping with food prep/baking/cooking
- Positive role modelling
- Encouraged to try new foods

WELLBEING – Children experience an environment where their emotional wellbeing is nurtured.

GOAL 2

- Good nutrition aids concentration and therefore helps children make the most of their preschool day
- Making healthy food choices

WELLBEING – Children experience an environment where they are kept safe from harm.

GOAL 3

- Allergies – how to keep themselves and friends safe
- Growing and nurturing edible plants

BELONGING – Children and their families experience an environment where connecting links with the family and the wider world are affirmed and extended.

GOAL 1

- Share a plate – bringing food from home to share from their culture
- Sharing produce from centre for whānau to take home
- Sharing recipes from families or menu

BELONGING – Children and their families experience an environment where they know that they have a place.

GOAL 2

- Growing and nurturing edible plants
- Feeding the worm farm
- Using worm juice on plants
- Composting bins

BELONGING – Children and their families experience an environment where they feel comfortable with the routines, customs and regular events.

GOAL 3

- Rolling morning teas
- Sharing kai time together
- Watching the change from seeds, to seedlings, to plant, to produce

BELONGING – Children and their families experience an environment where they know the limits and boundaries of acceptable behaviour.

GOAL 4

- Discuss why healthy food is the best food for lunchboxes
- Why they have “nut free zone” etc

CONTRIBUTION – Children experience an environment where there are equitable opportunities for learning, irrespective of gender, ability, age, ethnicity, or background.

GOAL 1

- Consistent messages through policies and role modelling
- Discussing the differences in what may come in the lunchboxes – different cultures

CONTRIBUTION – Children experience an environment where they are affirmed as individuals.

GOAL 2

- Food prep, food serving, self-feeding etc

CONTRIBUTION – Children experience an environment where they are encouraged to learn with and alongside others.

GOAL 3

- Learning about food
- Learning about plants
- Learning about the body and what it needs to grow

COMMUNICATION – Children experience an environment where they develop non-verbal communication skills for a range of purposes.

GOAL 1

- Sharing and turn taking at kai time
- Feely box of different fruit and vege and trying to guess correctly

COMMUNICATION – Children experience an environment where they develop verbal communication skills for a range of purposes.

GOAL 2

- Learning food names in other languages
- Learning fruit and vege songs/chants
- Learning about sweet, bitter, tart, sour when trying new foods

COMMUNICATION – Children experience an environment where they experience the stories and symbols of their own and other cultures.

GOAL 3

- Stories of where food is sourced
- Stories about children eating different foods in different cultures and countries
- Sequencing – making fruit kebabs
- Shopping game
- Lunchbox game
- Puzzles – fruit and vege

COMMUNICATION – Children experience an environment where they discover and develop different ways to be creative and expressive

GOAL 4

- Make objects using fruit and vege
- Baking with playdough
- Playing in the home corner/restaurant
- Breastfeeding a doll

EXPLORATION – Children experience an environment where their play is valued as meaningful learning and the importance of spontaneous play is recognized.

GOAL 1

- Planting seeds
- Placing celery into dye and watching the change of colour
- Re-enact stories: The Hungry Caterpillar, The Giant Potato, Goldilocks and the Three Bears

EXPLORATION – Children experience an environment where they gain confidence in and control of their bodies.

GOAL 2

- What foods are good for the various body parts
- Uses the 5 senses to guess the fruit/vegetable or food/drink
- Songs, dances and chants involving healthy food and healthy bodies

EXPLORATION – Children experience an environment where they learn strategies for active exploration, thinking and reasoning.

GOAL 3

- Making comparisons between taste/texture between raw and cooked food
- Taking photos of the cycle of growing veggies

EXPLORATION – Children experience an environment where they develop working theories for making sense of the natural, social, physical and material worlds.

GOAL 4

- Nature – compost, worm farm, veggies, cooking
- How do other cultures reap, cook food



Heart
Foundation

THINGS TO DO...
☒ HOMEWORK
☒ FOOTBALL
☒ TIDY ROOM

This resource was developed by the Heart Foundation with funding from the Ministry of Health.

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Printed March 2018

