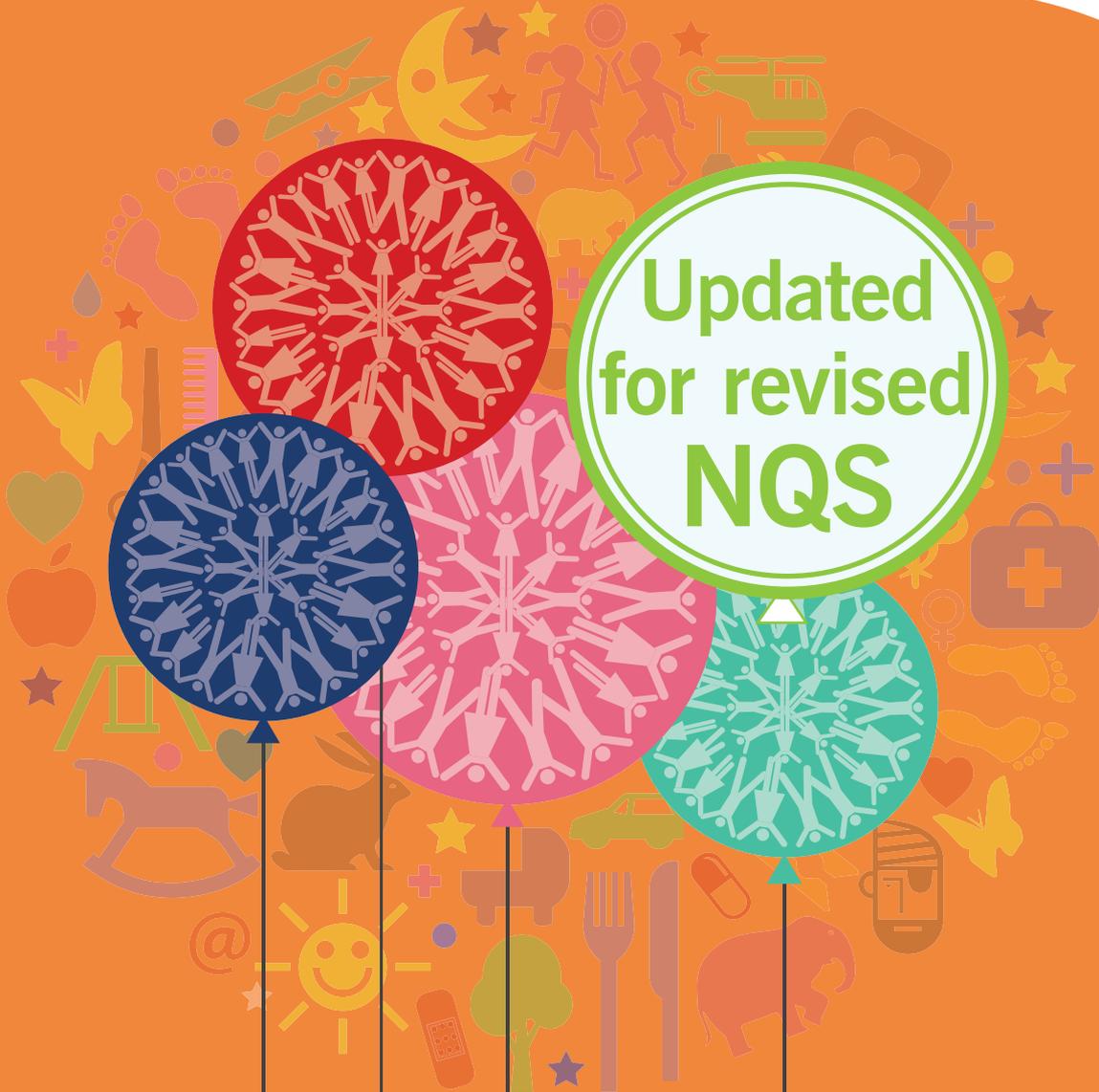


# CHCECE004

## Promote and provide healthy food and drinks



Updated  
for revised  
NQS

*Learner guide*



**aspire**  
learning resources

CHCECE004

# Promote and provide healthy food and drinks

Release 2

Learner guide

Aspire Version 2.1



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### CHCECE004 Promote and provide healthy food and drinks, Release 2



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Cover and design  
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First published February 2018

Cover design Rewind Creative

Printer Doculink Australia Pty Ltd, 1d/28 Rogers Street, Port Melbourne VIC 3207

e-ISBN 978-1-76075-086-2 (PDF version)

ISBN 978-1-76059-930-0

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## Before you begin

This learner guide is based on the unit of competency *CHCECE004 Promote and provide healthy food and drinks*, Release 2. Your trainer or training organisation must give you information about this unit of competency as part of your training program. You can access the unit of competency and assessment requirements at: [www.training.gov.au](http://www.training.gov.au).

## How to work through this learner guide

This learner guide contains a number of features that will assist you in your learning. Your trainer will advise which parts of the learner guide you need to read, and which practice tasks and learning checkpoints you need to complete.

Feature of the learner guide	How you can use each feature
<b>Learning content</b>	<ul style="list-style-type: none"> <li>▶ Read each topic in this learner guide. If you come across content that is confusing, make a note and discuss it with your trainer. Your trainer is in the best position to offer assistance. It is very important that you take on some of the responsibility for the learning you will undertake.</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>▶ These highlight learning points and provide realistic examples of workplace situations.</li> </ul>
<b>Practice tasks</b>	<ul style="list-style-type: none"> <li>▶ Practice tasks give you the opportunity to put your skills and knowledge into action. Your trainer will tell you which practice tasks to complete.</li> </ul>
<b>Video clips</b>	<ul style="list-style-type: none"> <li>▶ Where QR codes appear, learners can use smartphones and other devices to access video clips relating to the content. For information about how to download a QR reader app or accessing video on your device, please visit our website: <a href="http://www.aspirelr.com.au/help">www.aspirelr.com.au/help</a></li> </ul> 
<b>Summaries</b>	<ul style="list-style-type: none"> <li>▶ Key learning points are provided at the end of each topic.</li> </ul>
<b>Learning checkpoints</b>	<ul style="list-style-type: none"> <li>▶ There are learning checkpoints at the end of each topic. Your trainer will tell you which activities to complete. These activities give you an opportunity to check your progress and apply the skills and knowledge you have learnt.</li> </ul>



## Topic 1

In this topic you will learn about:

- 1A Meeting children's eating needs**

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- 1B Involving children in healthy eating activities**

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## Promoting healthy eating

Healthy eating is not just about providing healthy foods and making sure children eat them. The environment that is set up for eating plays a huge part in how children feel about mealtimes, how they participate in eating activities, and how they learn to understand their bodies and their needs.

The following table maps this topic to the National Quality Standard and both national learning frameworks.

<b>National Quality Standard</b>	
✓	Quality Area 1: Educational program and practice
✓	Quality Area 2: Children’s health and safety
	Quality Area 3: Physical environment
	Quality Area 4: Staffing arrangements
	Quality Area 5: Relationships with children
	Quality Area 6: Collaborative partnerships with families and communities
	Quality Area 7: Governance and leadership
<b>Early Years Learning Framework</b>	<b>My Time, Our Place</b>
<b>Principles</b>	
✓	Secure, respectful and reciprocal relationships
✓	Partnerships
✓	High expectations and equity
✓	Respect for diversity
✓	Ongoing learning and reflective practice
<b>Practice</b>	
✓	Holistic approaches
✓	Responsiveness to children
✓	Learning through play
✓	Intentional teaching
✓	Learning environments
✓	Cultural competence
✓	Continuity of learning and transitions
	Assessment for learning
<b>Outcomes</b>	
	Children have a strong sense of identity
✓	Children are connected to and contribute to their world
✓	Children have a strong sense of wellbeing
✓	Children are confident and involved learners
✓	Children are effective communicators

# 1A Meeting children's eating needs

Children's participation in and enjoyment of eating experiences is influenced by:

- ▶ the planned menu
- ▶ the healthy choices offered
- ▶ children's individual needs and requirements
- ▶ the structure of the eating environment.

Provide for consistent needs throughout the day, including:

- ▶ regular mealtimes and drinks
- ▶ healthy food choices
- ▶ opportunities for physical exercise
- ▶ having water available for children at all times.



With these needs in mind, the environment may be adapted to encourage children to enjoy mealtime routines and learn to love the science and art of food, while learning to choose healthy options. There are many ways that children can be presented with foods, participate in mealtimes and learn about their health.

## Mealtime routines

Routines for mealtimes may be structured or relaxed. Commonly, progressive mealtimes are being implemented as they fit well with the National Quality Standard (NQS) and learning framework objectives for children to be more active in their choices and respected for taking responsibility for their needs. A progressive mealtime is when the snack or mealtime foods are prepared and placed out ready to be eaten and children come in small groups to eat when they are ready. This replaces group mealtimes where children must all eat together at the same time.

You can access a copy of the NQS and learning frameworks online at:

- ▶ NQS: <http://aspirelr.link/national-quality-standard>
- ▶ EYLF and MTOP: <http://aspirelr.link/approved-learning-frameworks>

## Example

### Setting up a progressive mealtime

Marina prepares for a progressive snack time by placing a brightly coloured tablecloth on a table. She sets out four chairs, four plates, four cups, a platter of mixed fruit, some tongs and a jug of water.

Once the table is set up, four children sit down to eat. The children know they are welcome at the table when they are hungry.

Marina checks that they have washed their hands. While the children eat and drink, she discusses the fruits provided and chats to the children. The children use the tongs to select the fruits they will eat and pour their own cups of water from the small jug.

Two of the children leave the table after a few minutes. Marina reminds them to wash their hands again as the fruit is sticky.

She notices Gemma nearby and asks her if she would like some fruit and water. Gemma answers that she had some water earlier and that she is not hungry. Marina respects Gemma's decision.

Marina then asks other children if they would like to join her at the table. Children consistently approach the table after washing their hands. They eat and drink, then go back to their activities. Marina replenishes the jug and platter as needed.

Once all children have eaten or said that they are not hungry, Marina packs up the snacks and lays out a new activity.

Your decision to implement a progressive or group mealtime may link to a number of factors. For example, you may choose to have a group mealtime if you are celebrating a special occasion or need to supervise all children on your own. Alternatively, you may want to be flexible and provide different social experiences for the children where some meals are progressive and some are organised with the group. Part-group mealtimes work particularly well when the children range in ages and stages of development.

Some children may need to eat earlier than others or will be ready for a change in routine at different times. Whatever the routine may be, consider the following factors:

- ▶ setting the table
- ▶ furniture
- ▶ utensils
- ▶ clothing
- ▶ children's involvement.

Watch this video for more information about children's mealtimes.





### Setting the table

Children under five years are exploring foods and learning to use their utensils. The children and the floor may become messy during mealtimes. Choose a setting where any mess is easy to clean up. If you are in an area that cannot be easily cleaned, place a tablecloth or sheet under the eating area. Think about this first, and act to prevent issues so that you and the children are relaxed and able to enjoy the mealtime.

Your consideration of the setting also includes how it will be presented. Indoor and outdoor picnics are fun and loved by children. Brightly coloured blankets or log chairs make a picnic even more enjoyable.

Consider how the table is presented. Use different ideas to keep the children interested. Use a variety of items; for example, coloured tablecloths, flowers, napkins, music or a menu, and have children self-serve at the table or from a buffet. Move to different parts of the room or set up tables outdoors.



### Furniture

Highchairs, tables and chairs are the logical choices for mealtime furniture. Ensure that children are comfortable. Infants should be strong enough to hold their heads upright and sit unsupported. Toddlers should be stable in their chairs or not too tight in a highchair. Children should be able to sit at the table comfortably with their bodies at the right height for the table.



### Utensils

Safety is vital when choosing utensils, but practice allows children to gain skills. If you select utensils made specifically for children, their design should allow the children's skills to develop.

Utensils must suit the ability of the child and must also match the types of foods provided; for example, children who are served peas may find that they roll off a spoon, but they can spike them with a fork.

Infants may need to be spoon-fed by an educator, but will also benefit by holding a spoon at the same time. This gives them practice and encourages them to feed themselves.

Alternative utensils, such as chopsticks for older children (you can find easy-to-use ones that are joined together), can be fun and a great way to introduce cultural alternatives.



### Clothing

Bibs and napkins are useful for catching or wiping up mess. Encourage parents to provide children with clothing that allows them to practise all their skills with little anxiety about spots and stains. Children may be worried about getting nice clothes dirty. Keep a change of clothes handy if needed.



### Children's involvement

The more children take responsibility and are involved in eating, the greater their interest in the routine. Children can participate in many ways, including:

- ▶ choosing the foods to eat
- ▶ preparing part or all of their meal
- ▶ setting tables
- ▶ serving themselves and others
- ▶ cleaning up afterwards.

One way to involve children and help them learn about healthy meals is to work with them to plan menus. You may start with simple menu planning and then allow the children to cook some or all of the food.

Not all of the group has to be involved; you may find that using project groups works best for this type of activity.

Some ideas you could try are:

- ▶ teaching about food groups and encouraging the children to work out what they could add to a daily menu
- ▶ allowing the children to find a recipe for a salad or side dish that would go well with a particular main meal
- ▶ providing the current menu and gaining their input into what they do and don't like, then adapting the menu to include healthy options.

As with any other part of a routine, allow time for children to complete tasks; this is their time to learn. Be open to their participation. For example, allow them to wash their own dishes, even if you need to put them into the dishwasher later on.

Even though a mealtime routine is important, the environment and surroundings can alter and include small changes that encourage children to be interested in food and their health.

# Practice task 1

1. Tick the age group that may use this furniture or utensil.

<b>Furniture/ utensil</b>	<b>Infant</b>	<b>Toddler</b>	<b>Preschooler</b>
Highchair			
Spoon			
Fork			
Knife			
Cup			
Bottle			
Child-sized table and chair			

2. How would you set up the environment to create a positive and relaxed atmosphere during mealtimes for preschool-age children?

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.....

# 1B Involving children in healthy eating activities

Mealtimes provide a great opportunity to have positive and fun interactions. They are times for both adults and children to chat freely and talk about the foods they are eating, their interests and topics of the day.

Use meal and snack times to communicate, support and guide children.

## Communicating

Encourage children to communicate by doing the following:

- ▶ Talk to the children about the meal itself:
  - What colour is the food?
  - What is its texture?
  - What does it taste like?
  - How was the food prepared?
- ▶ Encourage children to talk with each other or with you.
- ▶ Discuss the nutritional values of different foods and why healthy food is good for us.

## Supporting and guiding

You are a role model and children will watch you eating and take notice of the healthy eating habits you demonstrate.

You can support and guide children during mealtimes by:

- ▶ encouraging healthy eating habits, such as finishing one mouthful before starting another
- ▶ suggesting manners to use, such as saying thank you or asking others to pass items
- ▶ creating enjoyable environments; for example, having some music playing
- ▶ helping children learn about hygiene by modelling appropriate actions yourself and supporting children in their attempts
- ▶ discussing the origin of the food provided, such as what country it is from, whether it grows in the ground, on a tree, or if it is processed in some way
- ▶ showing enthusiasm about the food being provided
- ▶ encouraging children to develop skills in helping themselves and each other, including:
  - setting the table
  - pouring their own drinks
  - serving their own food
  - making choices about foods on offer
  - cleaning up after eating
  - washing their hands and faces
  - helping others to do these tasks.

## Helping children make better choices

By modelling healthy practices and engaging children in experiences that promote healthy eating, you are able to encourage them to make better choices and learn to support others in doing so. The following table outlines some ideas.

What you can do	How you can do it
<p><b>Get involved in community activities</b></p>	<p>For example, Wyndham Council developed a healthy eating campaign called 'Give Peas a Chance'. This campaign supported parents to consider ways to incorporate more vegetables into their meals. A range of different activities were run throughout the area, including a pop-up kitchen, posters and activities in community learning centres.</p> <p>You could encourage parents to become involved, get involved yourself and share the outcomes with others in your organisation. You could even create your own child-focused campaign that supports this type of learning in your organisation.</p>
<p><b>Add healthy food to the play area</b></p>	<p>Replica fruit, vegetables, crackers and other items are available for purchase. You can also have staff and parents collect and bring in items such as used milk cartons, yoghurt tubs and healthy cereal boxes. You may even consider placing the real items in the play spaces, allowing children to prepare their own snacks and drinks as part of their play.</p>
<p><b>Treats don't need to be sweet</b></p>	<p>There are many recipes on the internet and in cookbooks that are low in sugar, fat and preservatives, and that taste and look great.</p> <p>For some recipe ideas, you could go to these websites:</p> <p>Super Healthy Kids: <a href="http://aspirelr.link/healthy-kids-recipes">http://aspirelr.link/healthy-kids-recipes</a></p> <p>Kids Health: <a href="http://aspirelr.link/kids-health-recipes">http://aspirelr.link/kids-health-recipes</a></p> <p>Healthy snacks for kids from Jamie Oliver: <a href="http://aspirelr.link/jamie-oliver-kids-snacks">http://aspirelr.link/jamie-oliver-kids-snacks</a></p> <p>You can also look for the following cookbooks:</p> <p><i>Cool healthy muffins: fun and easy baking recipes for kids!</i> by Alex Kuskowski</p> <p><i>Real food for healthy kids: 200+ easy, wholesome recipes</i> by Tanya Wenman Steel and Tracey Seaman</p> <p><i>Healthy meals for healthy kids: 80 delicious recipes for kids of all ages</i> by Catherine Atkinson</p>
<p><b>Grow a garden</b></p>	<p>A vegetable or herb garden is an excellent way for children to learn about where food comes from and how it grows. Children are more likely to want to eat food they have seen growing.</p>
<p><b>Take time to eat</b></p>	<p>Ensure enough time has been allowed for the mealtime routine to occur. Leisurely eating is healthy and enhances the enjoyment of food.</p>

<b>Edible art</b>	Provide opportunities to create edible art. Children love creative activities, so consider letting them serve their own foods from a selection and create a plate of art for lunch. Alternatively, take a little extra time to put food on the plate so it looks like a face, caterpillar or rainbow. If you do an internet search for 'food art images', you will find endless ideas to try.
<b>Talk about the food groups</b>	Have children create plates of food in different food groups. This could be part of their mealtime or during an activity. You can purchase or make a plate that demonstrates the food groups and the serving size that is appropriate for each. The <i>Australian guide to healthy eating</i> demonstrates these servings as a poster: <a href="http://aspirelr.link/healthy-eating-guide-aus">http://aspirelr.link/healthy-eating-guide-aus</a>
<b>Supermarket catalogues</b>	Collect supermarket catalogues and look at the different foods. Talk about healthy foods that we should eat all the time, and foods that we should only eat occasionally, as they are not healthy for our bodies. Create collages, use the pictures to draw a recipe that the children can follow or sort the foods into their food groups.
<b>Try different foods</b>	Introduce new, culturally rich or unusual foods to try, such as star fruit, dragon fruit and lychees. Every group of children will have different ideas about what is a new food. Ask parents for ideas on the types of food they eat at home.
<b>Present your setting in different ways</b>	Have a picnic, create a fancy restaurant theme, set up a buffet or ask children which space they would like to eat in today.
<b>Include books with a focus on food</b>	Books allow you to explore different ways of sourcing foods and alternative meal ideas. Even simple recipe books with photos are great for children to look through.

## Keeping involvement positive

Food should never be used as part of a disciplinary measure, and food should never be denied to a child as a punishment. Rewarding children with food – either healthy or unhealthy options – may also result in eating issues and emotional eating.

### Example

#### Handling a fussy eater

Shari is three years old, and is not eating her main course. Harrison, an educator, asks another educator, Mandy, whether he can tell Shari that if she doesn't eat her main meal she won't get any fruit, which is the second course.

Mandy explains that food and drink are not bargaining tools, but are basic needs that must be provided to all children. Mandy shows Harrison how all meals in the centre are nutritionally balanced and provide healthy choices; this includes all parts of the meal. She suggests that Shari be encouraged to eat without making much of a fuss. If she doesn't eat her main meal, she can be provided the healthy option of fruit as a second course.

## Practice task 2

1. Access *Belonging, being and becoming: The early years learning framework (EYLF)* or *My time, our place: Framework for school age care (MTOF)* and identify the outcome that discusses healthy eating.

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2. Find a children’s storybook that promotes healthy foods, or supports and guides children to eat healthy food. Provide the title and author of the book (some suggestions are provided below), then answer the following questions.

Children’s book ideas:

- ▶ *Blueberries for Sal* by Robert McCloskey
- ▶ *In the night kitchen* by Maurice Sendak
- ▶ *Bread and jam for Frances* by Russell Hoban
- ▶ *Herb, the vegetarian dragon* by Jules Bass
- ▶ *Mama Panya’s pancakes* by Mary Chamberlin
- ▶ *Food for me is gluten free* by Sally Learey
- ▶ *Food for me must be nut free* by Sally Learey
- ▶ *Once upon a time in the kitchen* by Carol Odell

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.....

- a. What do you particularly like about this book in relation to healthy food and eating?

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- b. How do you think this book could be used to help children assist in meal planning; for example, choosing healthy food to eat?

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- c. How might you use the information in the book during a mealtime to increase the children's understanding of healthy eating and nutrition, and model healthy eating habits?

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## Summary

- ▶ During mealtime routines, engage children in experiences and conversations that promote healthy lifestyles and good nutrition.
- ▶ Model healthy eating and good nutrition practices to children.
- ▶ Support and guide children to eat healthy foods.
- ▶ Ensure children always have access to water.
- ▶ Regularly offer children healthy food and drinks.
- ▶ Ensure furniture and utensils are suited to children's needs.

# Learning checkpoint 1

## Promoting healthy eating

1. Describe how you could create a positive relaxed environment during mealtimes for toddlers eating peas, carrots and chicken pieces by finishing the following sentences.

a. The utensils I would provide include ...

.....

b. The furniture I would provide includes ...

.....

c. I would use these three words to describe the foods in the meal:

.....

d. One thing I would talk about during the meal to make the time enjoyable would be ...

.....

e. I would fill the toddlers' cups with water and make sure this is available during their meal because ...

.....

f. Signs that the children are enjoying the mealtime include ...

.....

.....

g. I would model healthy eating and good nutritional practices by ...

.....

.....

2. Find one healthy recipe that children could make, and use it to answer the following questions. Provide the title of the recipe.

.....

a. List its nutritional values.

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.....

b. What are two ways you could involve preschool-age children in cooking this recipe?

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c. Access the EYLF or MTOP as appropriate to your service. How does this recipe link to an outcome?

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.....  
.....  
.....



## Topic 2

In this topic you will learn about:

**2A Understanding food choices**

**2B Providing for individual needs**

## Planning nutritious food and drinks

The vitamins and minerals gained from food and drink, also known as nutrients, serve our bodies in specific, targeted ways. The body's intake and use of food and drink is a three-part process:

1. Food and/or drink is consumed.
2. The body breaks down the food and/or drink into nutrients.
3. Nutrients travel through the bloodstream to different parts of the body where they are used for many purposes, including fueling the body.

A child's diet is influenced by many individual social, cultural and medical factors that can lead to special dietary requirements. Sometimes the absence (or inclusion) of certain nutrients can aggravate a number of physical and behavioural problems.

The *Australian dietary guidelines* offer directions to promote health and wellbeing and reduce the risk of diet-related conditions, including chronic diseases.

The following table maps this topic to the National Quality Standard and both national learning frameworks.

<b>National Quality Standard</b>	
	Quality Area 1: Educational program and practice
✓	Quality Area 2: Children’s health and safety
	Quality Area 3: Physical environment
	Quality Area 4: Staffing arrangements
	Quality Area 5: Relationships with children
	Quality Area 6: Collaborative partnerships with families and communities
	Quality Area 7: Governance and leadership
<b>Early Years Learning Framework</b>	<b>My Time, Our Place</b>
<b>Principles</b>	
✓	Secure, respectful and reciprocal relationships
✓	Partnerships
	High expectations and equity
✓	Respect for diversity
✓	Ongoing learning and reflective practice
<b>Practice</b>	
✓	Holistic approaches
✓	Responsiveness to children
✓	Learning through play
✓	Intentional teaching
✓	Learning environments
✓	Cultural competence
✓	Continuity of learning and transitions
	Assessment for learning
<b>Outcomes</b>	
	Children have a strong sense of identity
✓	Children are connected to and contribute to their world
✓	Children have a strong sense of wellbeing
✓	Children are confident and involved learners
✓	Children are effective communicators

# 2A Understanding food choices

Good nutrition is essential for growth, prevents sickness and helps to speed recovery if a child becomes unwell. Children who are well nourished are more likely to be alert, active and happy. Children who are missing out on certain nutrients may:

- ▶ have poor concentration
- ▶ display behaviour that is out of character
- ▶ have tooth decay
- ▶ be obese.

You may notice poorly nourished children being more emotional, reacting strongly to low-level stress situations or requiring more support or comfort from educators than usual. These outcomes occur due to the brain lacking what it needs to function adequately.

To ensure children's nutritional needs are catered for and their intake is sufficient, they must be provided with a variety of foods throughout the day. The diet a child has today affects their health and life both now and in the future.

The *Australian dietary guidelines* incorporate:

- ▶ the *Australian guide to healthy eating*, which is a food selection guide and education and promotion tool
- ▶ the *Infant feeding guidelines*, which support breastfeeding and are aimed at the needs of infants.

Information in the *Australian dietary guidelines* is focused on ensuring children are provided with and encouraged to eat the most nutritious meals possible. You can find out more about these guidelines at: <http://aspirelr.link/eat-for-health>

Element 2.1.3 of the National Quality Standard also applies, which states that healthy eating and physical activity must be promoted, and be appropriate for each child.

The guidelines are based on National Health and Medical Research Council (NHMRC) scientific research, and are intended to:

- ▶ promote health and wellbeing
- ▶ reduce the risk of diet-related conditions
- ▶ reduce the risk of chronic disease.

## ***Australian dietary guidelines***

To assist you to understand the nutritional needs of children, the *Australian dietary guidelines* have separated foods into different food groups. The food group method allows you to easily calculate what types of foods children need, how much food a child should eat and how to calculate serving sizes. Of course, all children have individual needs, but the following tables provide a summary.



Food group	Number of serves	
	1-4 years	4-6 years
Grains/cereals (mostly wholegrain and/or high-cereal fibre varieties)	4	4
Vegetables and legumes/beans	2-3	4.5
Fruit	0.5-1	1.5
Milk, yoghurt, cheese and/or alternatives (mostly reduced fat)	1-1.5	2
Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans	1	1.5

Food group	Suggested serving size for children
Grains/cereals (mostly wholegrain and/or high-cereal fibre varieties)	<p>1 slice of bread</p> <p>Half a medium roll or flat bread</p> <p>½ cup cooked rice, pasta, noodles, barley, buckwheat, semolina, polenta, bulgur or quinoa</p> <p>½ cup porridge</p> <p>⅔ cup (30 g) wheat cereal</p> <p>¼ cup muesli</p> <p>3 crispbreads</p> <p>1 crumpet, muffin or scone</p>
Vegetables and legumes/beans	<p>½ cup cooked green or orange vegetables</p> <p>½ cup canned beans, chickpeas or lentils</p> <p>1 cup green leafy or raw salad vegetables</p> <p>½ medium potato or other starchy vegetable (sweet potato, taro or cassava)</p> <p>1 medium tomato</p>
Fruit	<p>2 apricots, kiwi fruit or plums</p> <p>1 banana, apple, orange or pear</p> <p>1 cup diced or canned fruit (no added sugar)</p>
Milk, yoghurt, cheese and/or alternatives (mostly reduced fat)	<p>1 cup milk or buttermilk</p> <p>¾ cup yoghurt</p> <p>2 slices hard cheese such as cheddar</p> <p>½ cup ricotta</p> <p>1 cup of soy, rice or other cereal drink</p>

<b>Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans</b>	<p>65g cooked lean red meats such as beef, lamb, veal, pork, goat or kangaroo (90–100g raw)</p> <p>80g cooked lean poultry such as chicken or turkey (100g raw)</p> <p>100g cooked fish fillet or one small can of fish</p> <p>2 large eggs</p> <p>1 cup cooked or canned legumes/beans such as lentils, chickpeas or split peas</p> <p>170g tofu</p> <p>30g nuts, seeds, peanut or almond butter, tahini or other nut or seed paste</p>
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- The Australian dietary guidelines encourage you to:**
- ▶ provide plenty of drinking water
  - ▶ offer sweet and snack foods only sometimes and in small amounts
  - ▶ use small amounts of fats and oils.

When using fats, remember that there are good fats and bad fats. Choose the good fats where possible and remember that low-fat diets are not suitable for children under two years.

<b>Good fats</b>	<b>Bad fats</b>
Unsaturated fats – found in canola oil, avocado and nut butters/pastes	Saturated fats – found in butter, cream, margarine, coconut and palm oil
Omega-6 and Omega-3 fats – found in salmon, sardines, safflower and soybeans	Trans fatty acids – found in hydrogenated vegetable oil

There are two skills you need to ensure your menu planning and food provision choices are suited to children’s dietary needs:

1. Communication with families to determine the expectations they have for their children.
2. Understanding different types of foods, and how to identify and match them to requirements.

Regular communication and sharing of information with families enables you to identify the foods children enjoy or must avoid. Reading food labels is also part of your responsibility of caring for children’s health and wellbeing.

Watch this video about planning a menu for children.



## Reading food labels

Reading labels can be a challenge, but is necessary to choose healthy foods suited to children's needs.

All packaged products include on their label:

- ▶ a list of ingredients
- ▶ any relevant advisory statement that a food may contain a common food allergen
- ▶ a nutritional information panel (NIP).

### Ingredients

Food ingredients are always listed in order of the greatest to the least amount based on how much they weigh. If an ingredient shows a percentage (%), this highlights the amount of this ingredient that makes up the whole food. If the food label mentions an ingredient as 'flavoured', it means the ingredient is not present, but the food is flavoured so it tastes as though the ingredient has been used.

### Advisory statements

Advisory statements are provided to ensure that people with allergies and intolerances can avoid foods they react to. An advisory statement must be provided on the label if a food contains any of the following, or their products:

- ▶ sesame seeds
- ▶ eggs
- ▶ milk
- ▶ unpasteurised egg and milk products
- ▶ fish
- ▶ crustaceans (e.g. crabs, lobsters and crayfish)
- ▶ peanuts
- ▶ soybeans
- ▶ tree nuts
- ▶ bee pollen
- ▶ aspartame and phenylalanine
- ▶ caffeine
- ▶ plant sterols.

An advisory statement may say 'contains peanuts', 'contains caffeine' or 'may contain traces of egg or egg products', as in the following examples.

MAY CONTAIN TRACES OF EGG, MILK,  
NUT AND SESAME.

ALLERGY ADVICE: CONTAINS GLUTEN.  
MAY CONTAIN: EGG, MILK, TREE NUTS, SESAME AND SOY.

A child with an allergy or intolerance will have a list of foods to avoid that has been prepared by a dietitian or medical practitioner. Become familiar with the food names, as different names may be used to describe similar food products. For example, those who cannot have dairy foods should avoid:

- ▶ milk
- ▶ milk solids
- ▶ non-fat milk solids
- ▶ whey
- ▶ casein
- ▶ lacto acidophilus
- ▶ milk sugar
- ▶ cheese
- ▶ milk protein.

## Food additives

Food additives are ingredients, either natural or chemical, that are added to foods to help keep them fresh, make them easier to use or enhance their colour, flavour or texture. The additive may be spelt out in full, written as an abbreviation or represented by a number (called an E number). For example, monosodium glutamate is a food additive that may be written in full, listed as ‘MSG’ or listed as the E number 621. Here are the ingredients for a particular tub of hommus dip.

INGREDIENTS: Cooked chickpeas (60%), canola oil, sesame seed paste, olive oil, roast garlic (3%), vinegar, lemon juice, salt, sugar, herbs & spices, food acid (296), thickener (415).

MAY CONTAIN TRACES OF NUTS

The hommus dip ingredients list the numbers 296 and 415 as additives:

- ▶ 296 = malic acid: a natural product that adds a sour taste. It can cause irritation in the mouth if eaten in very large quantities. However, it is safe in small amounts.
- ▶ 415 = xanthan gum: used for many reasons, including as a food thickening agent and to stop oil from separating. Xanthan gum may be derived from a source that is an allergen, so care must be taken if an allergy to corn, soy or wheat is evident.

You can find a food additives list at: <http://aspirelr.link/food-additives-list>

The following apps list the E number, what the additive is, its origins, characteristics, safety level and possible side effects:

- ▶ E-Codes Free: Food Additives (Google Play)
- ▶ Food Additives Checker (E Numbers) (iTunes)

Whether a food additive is natural or chemical, it can cause allergies, intolerances, behaviour changes and other medical conditions. Be aware of these additives and double-check their origins.

## Nutritional information panels

A nutritional information panel (NIP) explains the nutrition that can be found in food. It includes the nutrition found in one serving and in 100 g. The serving size will be specified, and may be more or less than 100 g. Always check what a serving size is when using this information.

The hommus dip nutrition information panel looks like this.

<b>Nutrition information</b>		
<b>Servings per package: 20</b>		<b>Serving size: 10 g</b>
	<b>Quantity per serving</b>	<b>Quantity per 100 g</b>
Energy	138 kJ	1380 kJ
Protein	0.3 g	3.2 g
Fat, Total	2.7 g	27.2 g
Saturated	0.3 g	2.7 g
Carbohydrate, Total	1.9 g	19 g
Sugars	0.1 g	1.4 g
Sodium	0.024 g	0.24 g

When comparing foods to see which is more nutritious, use the 'Quantity per 100 g' panel. Try to choose foods from the 'Preferred foods' column in the following table.

<b>Nutrient</b>	<b>Preferred foods</b>	<b>Sometimes foods</b>	<b>Foods to avoid</b>
Fat	3 g per 100 g or less	3 g to 20 g per 100 g	More than 20 g per 100 g
Saturated fat	1.5 g per 100 g or less	1.5 g to 5 g per 100 g	More than 5 g per 100 g
Sugar	5 g per 100 g or less	5 g to 15 g per 100 g	More than 15 g per 100 g
Salt (sodium)	300 mg per 100 g or less	300 mg to 1500 mg per 100 g	More than 1500 mg per 100 g

Take notice of serving sizes, as the amount of food you provide alters the amount of ingredients included.

## Planning a menu

When you are planning a menu, or checking a menu planned by someone else, you should take the following into account.

### Guidelines

- ▶ *Australian dietary guidelines*
- ▶ *Infant feeding guidelines*
- ▶ *Australian guide to healthy eating*
- ▶ The policies and procedures of your service

### Recipes

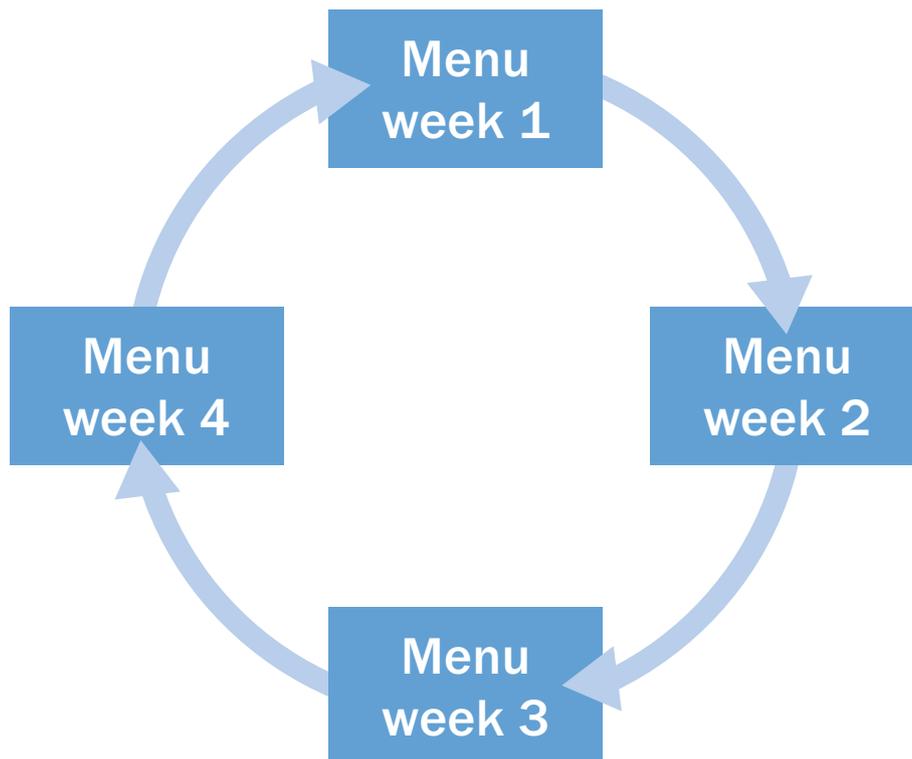
- ▶ A wide range from different cultures and lifestyles
- ▶ Both hot and cold meals

**Individual needs**

- ▶ The ages of children and the foods that are suitable to their developmental abilities
- ▶ Special dietary needs based on medical needs, intolerances or allergies
- ▶ Meal patterns of children
- ▶ What children like

The menu plan should be presented simply and placed in a position where adults and older children can see what foods are being provided. Discussion of this menu plan, as well as other food activities that occur in the organisation, allows you to educate both parents and children about healthy food choices. Parents may seek information from you about the types of food they should provide and the ways they can encourage their child to eat healthier foods.

Your service may find it useful to develop cycle menus – menus that span a period of time (such as a two-, three-, four- or six-week menu) that start from week one, then return to week one after all weeks have been completed. It may also be useful to have a seasonal menu, taking advantage of the foods that are fresh at the time and the types of foods children like to eat in hot or cold weather.



## Practice task 3

1. The Australian Department of Health has produced a range of useful resources to support the implementation of the *Australian dietary guidelines*. The resources may be found at: <http://aspirelr.link/eat-for-health>
  - a. Access, download and/or print a brochure representing healthy eating for children.
  - b. List the five Australian dietary guidelines.

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2. Explain what might cause a child to have poor concentration or to display out-of-character behaviour.

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3. Explain how you could assist parents to read food labels. What information or resources would you provide? Choose one of the following to focus on:
  - ▶ Ingredients
  - ▶ Advisory statements
  - ▶ Food additives

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4. Use the table provided to develop a balanced menu for one week. Include breakfast, lunch, dinner and snacks for five-year-old children.

<b>Week 1</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<b>Breakfast</b>					
<b>Morning snack</b>					
<b>Lunch</b>					
<b>Afternoon snack</b>					
<b>Late snack</b>					
<b>Dinner</b>					

# 2B Providing for individual needs

It is highly likely that some children may have special food requirements. These may originate from:

- ▶ developmental needs
- ▶ individual tastes
- ▶ medical requirements, allergies and/or intolerances
- ▶ cultural origins including racial background, religious beliefs and lifestyle choices.



## Developmental needs

Standard 2.1 of the NQS focuses on healthy eating and Element 2.1.3 highlights that food and drink should be provided appropriately for each child. This means that the developmental stage of a child influences how foods are provided. Babies should be fed individually by educators, while toddlers should be supported to feed themselves independently. Older children should be given opportunities to serve themselves and contribute to the menu and choices.

Children of different age groups have different abilities and nutritional requirements. The following table gives you an overview of the developmental changes you will notice.

Age	Developmental changes
<b>Newborn</b>	▶ Reflexes assist them to drink.
<b>6–10 days</b>	▶ Responds to the smell of milk.
<b>1–3 months</b>	▶ Trust develops through holding and being fed when hungry.
<b>3–4 months</b>	▶ Anticipates feeds.
<b>3–6 months</b>	▶ Communicates during feeds.
<b>4–6 months</b>	<ul style="list-style-type: none"> <li>▶ Reflexes in the tongue lessen, allowing food to be swallowed.</li> <li>▶ Able to hold their head upright without support.</li> <li>▶ Can turn away and close their lips if full.</li> <li>▶ Gets excited when food is being prepared.</li> <li>▶ Can transfer objects from hand to hand and from hand to mouth.</li> </ul>
<b>9 months</b>	<ul style="list-style-type: none"> <li>▶ Likes to try to feed self.</li> <li>▶ Likes to play with food.</li> <li>▶ Able to chew.</li> <li>▶ Can pick up small objects with fingers, including a spoon and a cup.</li> </ul>

Age	Developmental changes
12 months	<ul style="list-style-type: none"> <li>▶ Becomes fussier because they have some control over the environment and people.</li> <li>▶ Able to wait short periods for food preparation.</li> </ul>
18 months	<ul style="list-style-type: none"> <li>▶ Feeds self with spoon.</li> <li>▶ Growth slows, so less food is needed.</li> </ul>
3 years	<ul style="list-style-type: none"> <li>▶ Imitates others.</li> <li>▶ Feeds self.</li> <li>▶ Interested in handling and cooking food.</li> <li>▶ Has developed food preferences.</li> <li>▶ Can make simple food choices.</li> </ul>
4 years	<ul style="list-style-type: none"> <li>▶ Has strong self-help skills.</li> <li>▶ Seeks approval from other children, teachers and educators.</li> <li>▶ Has an irregular appetite.</li> </ul>
5 years	<ul style="list-style-type: none"> <li>▶ Appetite increases.</li> </ul>
5–12 years	<ul style="list-style-type: none"> <li>▶ Influenced by physical, social, spiritual, emotional and intellectual issues relating to food.</li> </ul>

Initially, an infant is breastfed or formula fed. The *Infant feeding guidelines* provide detailed information on both these methods and introducing solid foods to infants. The *Australian dietary guidelines* relate to the nutrition of children and adults, and promote breastfeeding.

## Infants

Here is some general information about introducing solid foods to infants.

### Introduce solid foods at around six months

Solid foods are usually introduced to an infant at about six months of age because:

- ▶ their digestive system has matured
- ▶ they need more nutrients, especially iron-rich foods
- ▶ they are beginning to chew and swallow more effectively, oral coordination is improving and teeth are emerging.

### Signs that an infant is ready for solids

Signs that an infant needs the nutrients that solid foods provide include:

- ▶ showing an interest in food, e.g. watching and leaning forwards when food is around
- ▶ putting their fingers in their mouth and being able to move their tongue up and down
- ▶ being able to sit upright and support their head independently
- ▶ reaching out to grab food or cutlery
- ▶ opening and closing their mouth when food is offered.

### Do not wait too long before introducing solids

Starting infants on solids too late may lead to problems, including:

- ▶ poor growth due to low energy intake
- ▶ iron-deficiency anaemia
- ▶ chewing or swallowing issues
- ▶ an increased risk of allergy.

Only introduce one food at a time so you can see if there are any reactions or allergies to each food. The first foods introduced are usually iron-rich foods such as cereals, pureed meat and poultry. It is recommended that you wait three days before introducing another new food as this will help you identify any reaction. You must have permission from parents prior to introducing any new food to an infant.

After 12 months, most infants are eating the same food as older children and can share the family meal.

Parents may ask you if you think the infant is ready to start solid foods. They may also ask you about which foods to start with. You can refer to the *Eat for health infant feeding guidelines summary* at: <http://aspirelr.link/infant-feeding-guidelines>

Watch this video for more information about introducing foods to infants and managing allergies.



## Toddlers

Toddlers are often picky eaters. The toddler's world is an exciting place, and food may be less important when there are many other things to do. At times parents are anxious about this reduced intake and need your support.

The following outlines some reasons a toddler's eating patterns change:

### Slower growth

Growth slows down in a child's second year. This means that toddlers often have smaller appetites and need less food. The amount eaten from day to day may also change dramatically. Although this sometimes worries parents, this change is expected and does not mean the child is being difficult or is unwell.

### Tendency to graze and snack

Toddlers rarely follow a traditional meal pattern. They often need small, regular snacks. This suits their small stomachs and provides the energy they need to keep moving all day. The amount eaten at mealtimes, particularly the evening meal, may be smaller than parents would like; however, children can balance the amount of food eaten with exactly how much they need if they are not forced to overeat or finish all the food on their plate. This means healthy snacks are important to provide the energy and nutrition toddlers need during the day.

### Fussy eating

Showing independence is part of a toddler’s development and this often includes refusing to eat foods to see what will happen. Rejecting a food does not always mean the child doesn’t like it. If you don’t make a fuss and offer it on another day, they may eat it.

#### To help manage toddlers’ diets:

▶ Be a role model by eating a healthy, balanced and varied diet.	▶ Provide healthy snacks appropriate for the child’s developmental stage.
▶ Remember that toddlers need small meals and regular snacks.	▶ Assume a child will like new foods.
▶ Don’t worry too much; a toddler’s appetite and food intake can vary daily.	▶ Let the child tell you when they are full.
▶ Offer small serves and give more if needed.	▶ Don’t force a child to finish all the food on their plate.
▶ Offer new foods in a relaxed way.	▶ Remove food after 20 minutes if the child has lost interest.
▶ Serve a new food with food the child already likes.	▶ Don’t use food as a reward, pacifier or punishment.
▶ Be patient and keep offering new foods, even if they are rejected at first.	▶ Use mealtimes to provide some nutritional education to the toddler.

### Older children

The ideas that children have about food can impact their health. Older children might hear or see food being used in certain ways, or ask questions about food.

This can be an opportunity to explore the following topics.

Areas of development	Discussion topics
<b>Physical</b>	<ul style="list-style-type: none"> <li>▶ What foods are needed to help you grow?</li> <li>▶ How does food make your body strong and healthy?</li> <li>▶ How much exercise do you need?</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>▶ What types of food does your family eat?</li> <li>▶ What do your friends and educators eat?</li> <li>▶ Is there any food you can't eat? How do you feel if you can't eat the same food as your friends?</li> </ul>
<b>Spiritual</b>	<ul style="list-style-type: none"> <li>▶ What sort of foods are included in your religion?</li> <li>▶ Do you eat certain foods during particular celebrations or at certain times in the year?</li> </ul>
<b>Emotional</b>	<ul style="list-style-type: none"> <li>▶ What food do you like to eat?</li> <li>▶ Is there any food you don't like to eat?</li> </ul>
<b>Intellectual</b>	<ul style="list-style-type: none"> <li>▶ What are good food choices?</li> <li>▶ What are foods you should eat every day?</li> <li>▶ What are foods you should only have sometimes?</li> </ul>

How children experience and deal with these issues affects the foods they choose and the amounts they eat.

## Individual tastes

Children's food choices are influenced by their likes and dislikes. While it is good to offer children a range of healthy foods, there may be some things that a child simply does not like or will not eat. Encourage the child to at least try the food, but never force a child to eat something they don't like. Instead, try to find an appropriate substitute; for example, if a child does not like pears, offer them an apple. If they don't like the lunch being served, they might choose a healthy sandwich instead.

When it comes to food, presentation is important. When you present food to children, think about how you place the food on the plate. If the food doesn't look appetising, try to think of ways to make it look more appealing.

Making food appetising includes considering:

- ▶ colour
- ▶ shape
- ▶ texture
- ▶ variety.

There are also many recipes that hide healthy foods. Consider the following examples.

Recipe	Hidden food	Website
Golden bread rolls	Carrots	<a href="http://aspirelr.link/golden-rolls">http://aspirelr.link/golden-rolls</a>
Red velvet devil's cake	Tomato juice	<a href="http://aspirelr.link/red-velvet-cake">http://aspirelr.link/red-velvet-cake</a>
Sunny risotto	Carrot juice	<a href="http://aspirelr.link/sunny-risotto">http://aspirelr.link/sunny-risotto</a>
Mini sausage rolls	Carrot and zucchini	<a href="http://aspirelr.link/mini-sausage-rolls">http://aspirelr.link/mini-sausage-rolls</a>
Mac and cheese	Carrots, cauliflower and pumpkin	<a href="http://aspirelr.link/mac-and-cheese">http://aspirelr.link/mac-and-cheese</a>
Berry and beet popsicles	Beetroot	<a href="http://aspirelr.link/berry-beet-popsicles">http://aspirelr.link/berry-beet-popsicles</a>

When children participate in food activities, they often find the food more attractive. They are interested in eating the food they have made or doing a new activity relating to food.

**Some food activities that may encourage children to become interested in food include:**

- ▶ setting tables
- ▶ cleaning up after eating
- ▶ pouring their own drinks
- ▶ serving their own meals
- ▶ helping in food preparation e.g. sifting, shaking, tearing lettuce, cutting soft foods, mixing ingredients, cracking eggs, peeling fruit or vegetables, mashing or measuring ingredients
- ▶ doing food-related puzzles, games and activities
- ▶ growing vegetables or fruit
- ▶ visiting a market or supermarket
- ▶ visiting a garden or orchard.

## Medical requirements, allergies and intolerances

Food choices are linked to a huge range of medical issues, such as cardiovascular disease, diabetes and coeliac disease. Scientific evidence also suggests that poor food choices can cause growth issues in early childhood and can influence health in later life.

Food allergies or intolerances must be diagnosed by a health professional, such as a doctor, nutritionist or dietitian. The appropriate action should be decided by these professionals, as different children may react to foods differently and require their own food guidelines.

Where possible, get a copy of the child's diet and food preferences as designed by their health professional and stick to this list of acceptable foods. Work with the child's family to ensure you receive up-to-date information and meet the child's needs. Every staff member should be aware of children's special dietary requirements and know where to find the information that relates to these. Most families are more than happy for you to display a warning poster with the child's requirements and action plan in a prominent place.

### Diabetes

Diabetes occurs when the blood sugar or blood glucose level in the body is higher than it should be due to a lack of insulin or decreased insulin function. Insulin is the hormone the body produces to regulate blood glucose levels. To maintain an adequate glucose level, a child with diabetes should be provided with the same nutritional balance as any other child; however, children with diabetes require different amounts and types of foods. Some people with diabetes may require insulin injections to help control their blood glucose levels.

### Coeliac disease

Coeliac disease affects the small intestine and is the result of intolerance to gluten. Unlike many other food intolerances, however, coeliac disease may lead to many serious health complications if left untreated. People who have coeliac disease cannot eat foods containing gluten, which includes wheat, rye, oats and barley. The common symptoms of coeliac disease include:

- ▶ abdominal pain
- ▶ bloating and flatulence
- ▶ bulky, foul-smelling bowel motions
- ▶ chronic anaemia
- ▶ diarrhoea or constipation
- ▶ nausea and vomiting
- ▶ poor weight gain or weight loss in older children
- ▶ delayed growth or delayed puberty
- ▶ tiredness
- ▶ irritability.

A child with coeliac disease or diabetes will have a specific diet developed by a dietitian or nutritionist. Each child's needs are different, so make sure the diet is correct and as prescribed.

Some gluten-free grains include:

- ▶ brown, black or wild rice
- ▶ quinoa
- ▶ amaranth
- ▶ pure buckwheat
- ▶ corn flour
- ▶ cornmeal
- ▶ popcorn
- ▶ millet
- ▶ gluten-free oats
- ▶ sorghum

Each child is different, so be sure to check for grains that are most suitable.

### Obesity

Obesity is diagnosed by a doctor, nutritionist or dietitian when a child is excessively overweight. In children, obesity is usually caused by unhealthy eating and lack of exercise. To support children who are obese, you can provide education to families around healthy eating and work with them to:

- ▶ provide a range of healthy meals and snacks
- ▶ encourage children to be physically active
- ▶ teach children about preferred foods, sometimes foods and foods to avoid
- ▶ treat all children with respect
- ▶ build the self-esteem of all children
- ▶ ensure all children receive enough nutrition throughout the day
- ▶ focus on children's interests and strengths.

### Underweight children and nutritional deficiencies

Underweight children and nutritional deficiencies occur due to either a lack of adequate healthy foods or as a result of a medical condition. A child who is underweight or who has a nutritional deficiency needs support from a dietitian or nutritionist and medical practitioner to ensure their particular needs are met. The child's family may also need support and guidance to assist with:

- ▶ understanding healthy foods
- ▶ behaviour guidance for children who are chronically fussy or difficult eaters
- ▶ financial access to purchase food
- ▶ access to food stores
- ▶ medical care for the causes and/or outcomes of deficiency.

As an educator, you can:

- ▶ find and provide information and support to families
- ▶ include healthy foods on the menu
- ▶ follow dietitian or medical advice for menus
- ▶ model healthy eating
- ▶ discuss healthy eating
- ▶ be aware of individual needs.

## Food allergies

Food allergies can cause serious, life-threatening reactions, so special care is needed when providing meals. The most common types of foods that children may be allergic to are:

- ▶ eggs
- ▶ cow's milk and other dairy products
- ▶ nuts
- ▶ fish and other seafood.

**The symptoms of a food allergy include:**

- ▶ anaphylactic shock
- ▶ itching, burning and swelling around the mouth
- ▶ a runny nose
- ▶ a skin rash (eczema)
- ▶ hives
- ▶ diarrhoea and/or abdominal cramps
- ▶ breathing difficulties, including wheezing and asthma
- ▶ nausea and vomiting.

Ensure you are alert and know what to do if you see a child displaying any of these symptoms.

Watch this video about different food allergies children may have.

## Anaphylaxis

Anaphylaxis is a severe allergic reaction that needs urgent medical attention. Nuts, insect stings and some medicines are the most common allergens that cause anaphylaxis. Within minutes of exposure to the allergen, a child may experience potentially life-threatening symptoms, including:

- ▶ difficult or noisy breathing
- ▶ swelling of the tongue
- ▶ swelling or tightness in the throat
- ▶ difficulty talking or a hoarse voice
- ▶ wheezing or a persistent cough
- ▶ loss of consciousness or collapse
- ▶ becoming pale and floppy (in young children).

Several factors influence the severity of anaphylaxis, such as exercise, heat, the amount of food eaten and how food is prepared and consumed.

To prevent severe injury or death, a person experiencing anaphylaxis requires an injection of adrenalin. These injections can be given by an educator or other adult. They are available by prescription or directly from a pharmacy. If you suspect anaphylaxis, follow your service's first-aid policy.

Due to the severe reaction of anaphylaxis, it is advised that any food that may cause such a reaction be removed from the organisation. For example, many organisations are nut-free. In some cases, the child may only need to smell or touch the food to develop an allergic reaction. This means you must acknowledge the issue of contamination and separate all foods of danger during preparation, handling and service. Cross-contamination can occur on:

- ▶ cutting boards and knives
- ▶ baking and cooking utensils
- ▶ serving utensils and crockery.

Cross-contamination can also occur when foods are served close together on a platter.



## Food intolerance

Food intolerance differs to a food allergy in that an allergy is usually a fast response by the body's immune system, whereas intolerance is the body's inability to process a particular food. Intolerances are less severe and much more common.

### Symptoms of food intolerance can include:

▶ nervousness, tremors	▶ abdominal pain
▶ sweating	▶ burning sensations on the skin
▶ palpitations	▶ tightness across the face and chest
▶ rapid breathing	▶ breathing problems – asthma-like symptoms
▶ headache, migraine	▶ skin rashes including eczema
▶ diarrhoea	▶ allergy-like reactions.

Dairy intolerance is common and is caused by lactose (the sugar content of milk) not being broken down during digestion. Lactase is the enzyme that is responsible for this breakdown. Some people don't make sufficient lactase, causing them to have trouble digesting lactose. This means that the lactose will pass into the large bowel, where it will ferment, causing diarrhoea, abdominal pain and wind.

If a child is lactose intolerant, a special diet can be arranged that substitutes dairy products that contain lactose for lactose-free products. These products have some or all of the lactose removed. Milk, cheese, yoghurt and margarine substitutes are available.

Be aware that some foods may contain hidden lactose, such as:

- ▶ biscuits and cakes (if milk or milk solids are added)
- ▶ processed breakfast cereals
- ▶ creamy soups
- ▶ milk chocolate
- ▶ pancakes and pikelets
- ▶ scrambled eggs
- ▶ muesli bars.

## Dental care

Teeth begin to erupt at around six months of age, and all first teeth are expected to be present at two to three years. This process can be painful as teeth break through gum tissue. During this time, you may notice signs of discomfort, such as children:

- ▶ frequently putting hands and other objects in the mouth
- ▶ dribbling
- ▶ experiencing redness and swelling of the gums
- ▶ being restless.



Providing cold teething rings, a toothbrush or some other safe item for the child to chew on can relieve these symptoms. There are also gels that can be rubbed onto the gums, although you must follow the medication procedure of your service and gain parental permission to use these.

Infants' bottles have been identified as a common cause of tooth decay. It is unsafe for a child to fall asleep with a bottle in their mouth due to the high possibility of choking and because the contents of the bottle can sit in the child's mouth, coating their teeth for long periods of time. Tooth decay can occur either before or after an infant's teeth erupt.

#### **To prevent infants and toddlers from developing tooth decay:**

- ▶ Encourage breastfeeding.
- ▶ Remove a bottle from a child's mouth, unless they are feeding.
- ▶ Only use a bottle for water, milk or formula.
- ▶ Introduce a cup as soon as possible.
- ▶ Clean the child's teeth after feeding using a face washer.
- ▶ Never dip a dummy in food or liquid as the coating sits on the teeth.

#### **To help care for children's teeth:**

- ▶ Offer healthy food as much as possible.
- ▶ Limit foods high in processed sugar.
- ▶ Offer water throughout the day, particularly after meals to wash away food from teeth.
- ▶ Encourage children to brush their teeth regularly.
- ▶ Encourage parents to provide regular dental check-ups for their children from the time their first tooth erupts.
- ▶ Promote healthy eating and dental care to parents by having information nights and dentist visits, and providing pamphlets.

Previously it was thought that eating an apple after a meal helps to clean teeth, but this is not the case. Apples are high in sugar, which can cause tooth erosion if regular brushing does not occur.

## **Cultural backgrounds, religious beliefs and lifestyle choices**

Diets based on cultural backgrounds, religious beliefs or lifestyle choices should be taken as seriously as diets based on medical reasons. Parents make choices for their children, and educators must show respect by following these decisions. In some circumstances there are serious outcomes for the child and their family if the requested diet is not adhered to.

**A diet influenced by culture may involve food preferences that relate to:**

- ▶ religious observations
- ▶ preparation methods
- ▶ meal patterns or approaches
- ▶ foods eaten
- ▶ hot or cold options
- ▶ spices and flavourings used
- ▶ individual tastes
- ▶ sweet or savoury choices
- ▶ home routines.

## Common dietary approaches

Common dietary approaches include:

- ▶ gluten-free diets
- ▶ clean eating, in which foods are whole and unprocessed
- ▶ functional medicine approaches, where underlying causes of disease or conditions are investigated and food choices are included as part of treatment
- ▶ vegetarian diets that do not include meat or fish
- ▶ vegan diets, in which all animal-based products are avoided, including meat, fish, eggs and dairy.

The following outlines how to handle some common dietary approaches.

### Gluten-free diet

Gluten-free products, including bread and biscuits, can be made or purchased and substituted for usual foods. Many of these products taste very similar to foods that contain gluten and can be eaten by all children.

Gluten-free grains include:

- |             |          |
|-------------|----------|
| ▶ buckwheat | ▶ corn   |
| ▶ polenta   | ▶ millet |
| ▶ quinoa    | ▶ rice.  |

### Vegetarian diet

Diets that exclude meat can include nutritious alternatives; however, special care needs to be taken to ensure all nutrients and food groups are provided to children. As with other diets, each family has their own preferences and you must check with parents to ensure you are following their guidelines.

Some alternatives to meat include:

- |  |                                  |
|--|----------------------------------|
| ▶ beans, including kidney beans, borlotti beans and cannellini beans | ▶ dairy products, such as cheese |
| ▶ lentils  | ▶ soy products, such as tofu     |
| ▶ chickpeas  | ▶ eggs.                          |

Some cultural groups experience health issues that relate to food intake and healthy eating. In particular, you may find some children are at risk of being underweight or having certain nutrient deficiencies. These issues may occur due to:

- ▶ a lack of access to healthy foods or a variety of foods
- ▶ a lack of money to purchase foods needed
- ▶ illnesses that draw heavily on particular nutrients
- ▶ the implementation of special diets without knowledge or ability to provide a balance of nutrition; for example, a vegetarian diet that does not replace the nutrients in meat with an equivalent alternative
- ▶ lack of dietary knowledge
- ▶ a misunderstanding of what are appropriate foods for particular ages or developmental stages
- ▶ fear of obesity.

## Practice task 4

1. Access the NQS at: <http://aspirelr.link/national-quality-standard>. Element 2.1.3 states: 'Healthy eating and physical exercise are promoted and appropriate to each child'.

Below are some individual dietary needs that a family may request. If the meal includes pasta, ham, cheese and garlic bread, explain how you would meet Element 2.1.3 by altering the meals to meet the needs of each of the following children.

- a. Vicky has a gluten-free diet. How would you alter the meal to meet Vicky's needs?

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- b. Chaya is of Jewish faith and does not eat ham. How would you alter the meal to meet Chaya's needs?

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- c. Harry does not like cheese. The smell makes him feel nauseous. How would you alter the meal to meet Harry's needs?

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- d. Simon eats a vegetarian diet. How would you alter the meal to meet Simon's needs?

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2. Read the case study, then answer the question that follows.

**Case study**

Indigo is allergic to dairy products. If she eats dairy foods, she will have an anaphylactic reaction. If she touches dairy foods, her skin develops hives in this location.

If the following menu was planned for the day, how would you ensure no cross-contamination occurred? Tick the precautions you would take for each meal.

Meal	Monday	Precaution		
		Use a separate cutting board and knife	Use separate baking and cooking utensils	Serve foods separately
Breakfast	Cereal, milk			
Morning snack	Fruit, water			
Lunch	Mixed sandwiches – cheese/vegemite/tomato/ham			
Afternoon snack	Yoghurt-topped muffins or plain muffins			

3. Why should you do the following things?

a. Remove bottles from sleeping children.

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b. Only use water, milk or formula in bottles.

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c. Clean the teeth of infants and/or encourage parents to do this.

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d. Encourage children to brush their teeth.

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## Summary

- ▶ There are a range of guidelines and support materials available to assist you to ensure children are provided with healthy eating choices.
- ▶ Children's dietary provisions must match the advice given by families.
- ▶ Children's likes, dislikes, cultural, religious and medical requirements must be met.
- ▶ Food labels must be understood so that you can interpret meal content.
- ▶ Families should be provided with education and support relating to healthy eating.
- ▶ Menus detailing foods provided must be developed and displayed.

# Learning checkpoint 2

## Planning nutritious food and drinks

### Part A

Analyse the two nutritional information panels (NIPs), then answer the questions that follow.

Cereal 1 – nutrition information		
Servings per package: 12		Serving size: 30 g
Quantity per serving		Quantity per 100 g
Energy	447 kJ	1490 kJ
Protein	3.7 g	12.4 g
Fat, total	0.4 g	1.4 g
Saturated	0.1 g	0.3 g
Carbohydrate, total	20.1 g	37.0 g
Sugars	1.0 g	3.3 g
Sodium	87 mg	290 mg

Cereal 2 - nutrition information		
Servings per package: 16		Serving size: 30 g
Quantity per serving		Quantity per 100 g
Energy	480 kJ	1600 kJ
Protein	6.6 g	21.9 g
Fat, total	0.2 g	0.6 g
Saturated	<0.1 g	0.1 g
Carbohydrate, total	20.8 g	69.4 g
Sugars	9.6 g	32.0 g
Sodium	168 mg	560 mg

1. Which cereal is the healthier choice? Why?

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2. If one of the cereals contained the additive 951, what would this additive be? What purpose does it have?

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3. The *Infant feeding guidelines* state the following:

- ▶ ‘First foods should be iron-rich and an increasing range and quantity of foods should be introduced so that by 12 months the infant is consuming a wide variety of family foods.’
- ▶ ‘The texture of foods should be suitable to the infant’s stage of development, progressing from pureed to lumpy to normal textures during the 6–12 month period.’

Go to a supermarket or food store and look at the baby foods. Read a range of labels and identify one food that is suitable to provide to a six-month-old. Look at the nutritional elements and the texture of the food. Explain why this food is suitable.

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## Part B

Read the menu for five-year-old children, then complete the tasks that follow.

Meal	Sample menu
<b>Breakfast</b>	Wheat cereal (1 serve) with milk (½ serve)
	Water
<b>Morning tea</b>	Vegetable sticks (1 serve) with hommus dip (1 serve)
	Water
<b>Lunch</b>	Chicken (1 serve) and vegetable stir-fry (1½ serves) with rice (1 serve)
	Stewed apple (½ serve) and custard (1 serve)
	Water
<b>Afternoon tea</b>	
<b>Dinner</b>	Tuna patties (1 serve) with peas and carrot (1 serve), and polenta (1 serve)
	Fruit kebabs (½ serve)
	Water

1. Complete the following tasks:
  - a. Identify how many serves of each food group are already included in the menu – use a table similar to the example provided to record your calculations.
  - b. List the remaining number of serves to be added to the menu.
  - c. Use this information to recommend a suitable afternoon tea option to provide all the remaining food groups’ serves.

Food group	Number of serves shown in the menu	Number of serves suggested per day for a 5-year-old child	Number of serves to be added to the menu
Grains/cereals, mostly wholegrain and/or high cereal fibre varieties		4	
Vegetables and legumes/beans		4.5	
Fruit		1.5	
Milk, yoghurt, cheese and/or alternatives, mostly reduced fat		2	
Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans		1.5	

2. If a child had an allergy to seafood, explain how you would do the following:
- a. Provide an alternative to tuna patties in the menu.

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- b. Ensure there is no cross-contamination between the tuna patties and the safe food you chose in your previous response.

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- c. Talk to the parent if they suggested you just remove the tuna patties from the child’s meal and not replace it with any substitute.

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- d. Observe the child for symptoms of anaphylaxis.

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3. List five implications that a poor diet may have on a child.

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4. Answer the following questions:

a. Access the NQS for Element 2.1.3. In regard to healthy eating, how is this standard demonstrated in your service?

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b. Access the Education and Care Services National Regulations, Regulation 79 (1). Explain how an approved provider can meet the regulations regarding providing food and beverages.

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c. Access the Early Childhood Australia Code of Ethics at:  
<http://aspirelr.link/eca-code-of-ethics>

Which point outlines the rights of the family to make decisions about the child?

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d. Access the United Nations Convention on the Rights of the Child, Article 24, at:  
<http://aspirelr.link/unicef-child-rights>

In your own words, summarise what the article says about nutrition.

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## Part C

1. Describe what a menu cycle is. How is it developed and used?

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2. Parents might be kept informed about the foods being offered each day through a menu display. Develop an additional item of information that explains to parents the nutritional value of fruit.
- .....
- .....

3. Complete the following menu cycle for children four years and over.
- Add five different lunch choices that contain two serves of vegetables, one serve of meat (or alternatives) and one serve of grain foods.
  - Add six different snack choices that contain a serve of grain foods and either a serve of vegetables or a serve of dairy.

Week 1	Monday	Tuesday	Wednesday	Thursday	Friday
<b>Morning tea</b>		Seasonal fruit platter	Seasonal fruit platter		Seasonal fruit platter
<b>Lunch</b>		Spaghetti bolognaise with carrot and peas	Vegetable risotto with cheesy garlic bread	Creamy chicken casserole with rice, cauliflower and beans	
<b>Afternoon tea</b>	Seasonal fruit platter			Seasonal fruit platter	Cheese on toast

Week 2	Monday	Tuesday	Wednesday	Thursday	Friday
<b>Morning tea</b>	Vegetable sticks with cheese cubes	Seasonal fruit platter	Seasonal fruit platter	Seasonal fruit platter	
<b>Lunch</b>	Meatballs, mash, broccoli and carrots		Mixed sandwiches		
<b>Afternoon tea</b>	Yoghurt and muesli	Dip and crackers		Tea cake with milk	Seasonal fruit platter





## Topic 3

In this topic you will learn about:

### **3A Food-related policies and procedures**

### **3B Using safe food-handling practices**

## Handling food safely

Food is a medium for cross-infection. There are specific procedures you must adhere to in order to reduce the risk of infection between:

- ▶ foods themselves
- ▶ food handlers and consumers.

These procedures also extend to children who are involved with food preparation.

The areas where food is prepared, served and eaten are also potentially infectious and must be subject to regular cleaning standards and routines. These include pest control measures as well as specific procedures for the delivery, storage, cooking, serving and freezing of food.

Each service should have specific policies and procedures for food preparation, including directions for bottle-feeding formula and breastmilk, feeding solid foods and for storing and serving foods from home.

The following table maps this topic to the National Quality Standard and both national learning frameworks.

<b>National Quality Standard</b>		
	Quality Area 1: Educational program and practice	
✓	Quality Area 2: Children’s health and safety	
	Quality Area 3: Physical environment	
	Quality Area 4: Staffing arrangements	
	Quality Area 5: Relationships with children	
	Quality Area 6: Collaborative partnerships with families and communities	
	Quality Area 7: Governance and leadership	
<b>Early Years Learning Framework</b>	<b>My Time, Our Place</b>	
<b>Principles</b>		
	Secure, respectful and reciprocal relationships	
	Partnerships	
	High expectations and equity	
	Respect for diversity	
✓	Ongoing learning and reflective practice	
<b>Practice</b>		
✓	Holistic approaches	Holistic approaches
	Responsiveness to children	Collaboration with children
	Learning through play	Learning through play
	Intentional teaching	Intentionality
	Learning environments	Environments
✓	Cultural competence	Cultural competence
✓	Continuity of learning and transitions	Continuity and transitions
✓	Assessment for learning	Evaluation for wellbeing and learning
<b>Outcomes</b>		
	Children have a strong sense of identity	
	Children are connected to and contribute to their world	
	Children have a strong sense of wellbeing	
	Children are confident and involved learners	
	Children are effective communicators	

# 3A Food-related policies and procedures

Australian food safety laws are in place to ensure all food provided outside the home environment is safe and free from contamination. Services that prepare food must be registered as food providers and must meet the standards of practice. Food safety laws encourage businesses to:

- ▶ follow a food safety program
- ▶ follow advice given by any food safety supervisor
- ▶ train staff involved in food handling.

Overarching guidelines that relate to food decisions and choices for supporting healthy food provision are shown in the following table.

Guideline	Summary
United Nations Convention on the Rights of the Child – survival and development rights	The right to adequate food and clean water
Early Childhood Australia Code of Ethics	To act in the best interests of children, and respect the rights of children as enshrined in the UN Convention on the Rights of the Child
Education and Care Services National Regulations	To promote the health, safety and wellbeing of children by: <ul style="list-style-type: none"> <li>▶ following health, hygiene and safe food practices</li> <li>▶ providing healthy food and beverages</li> </ul>
National Quality Standard: Element 2.1.3	Healthy eating and physical activity are promoted and appropriate for each child.
Australia New Zealand Food Standards Code (Food Standards Australia New Zealand)	This code lists requirements for foods such as additives, food safety, labelling and genetically modified foods. Enforcing and interpreting the code is the responsibility of each state or territory’s health department.  The code contains useful information on infant formula products, foods for infants, formulated meal replacements and formulated supplementary foods.

Organisational policies and procedures should be written with reference to these guidelines. If you are ever unsure about a procedure or practice, or think a procedure could be improved, speak to your supervisor or manager.

When you follow the policy and procedures for addressing health conditions or illnesses that may impact safe and healthy food handling, you are reducing the chance of contamination. For example, there may be a policy in place that states if a worker is sick, they must not come to work and must only return when they are not contagious. This is especially important if they handle food. It may also be appropriate for a worker to alter their duties; for example, to work in a different area of the service until it is safe for them to handle food again.

Watch this video about food-handling procedures.



## Practice task 5

1. Access a copy of the Australia New Zealand Food Standards Code – Standard 3.3.1 at: <http://aspirelr.link/food-standards-code>

Answer the following questions:

- a. Is a long day care service classed as a ‘Food service to vulnerable persons’?

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- b. Does a long day care service need to implement a documented and audited food safety program?

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- c. What should a long day care service policy say about staff handling food when they are unwell?

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- d. What would you do if the policy did not say this?

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2. The Education and Care Services National Regulations 77, 78, 79 and 80 relate to food and food safety. All regulated services must provide a copy of these regulations, or you can access a copy at:  
<http://aspirelr.link/education-and-care-national-regulations>

Regulation 78 states that water must be accessible to children at all times. How does your service policy ensure this occurs?

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# 3B Using safe food-handling practices

When handling food, hygiene is of utmost importance. Any worker who handles food must ensure they:

- ▶ wash their hands before and after handling raw food
- ▶ cover any cuts or wounds with waterproof bandages, using coloured strips so they can be easily seen if they fall off
- ▶ never smoke, chew gum, spit or eat while handling food or while in a food preparation area.

If food-handling practices are not followed, people can become very sick and even die from food poisoning. As children are particularly vulnerable to food poisoning, special care must be taken.

## Hand-washing

Hand-washing is the single most important task you can do to reduce the chances of contaminating foods with micro-organisms. Bacteria and other micro-organisms are present on the hands at all times and live in the oil that is naturally produced on your hands. Soap or detergent and water remove most of these organisms and decrease the risk of cross-contamination.

### Hand-washing is most effective when you follow these guidelines:

- ▶ Remove jewellery from your hands, wrists and fingers prior to washing; these may hold bacteria in or under them.
- ▶ Use warm running water, although cold running water is also acceptable.
- ▶ Dispense soap or detergent from a liquid dispenser; a cake of soap harbours micro-organisms that can grow and spread to the next person who uses it.
- ▶ Clean all hand surfaces with soap or detergent, including the sides of hands and in-between fingers.
- ▶ Use a nail brush to clean dirty fingernails; short nails are easiest to clean.
- ▶ Use a paper towel or your arm to turn off the taps; if available, use a tap with an automatic sensor.
- ▶ Use a paper towel or a blower to dry hands (cloth towels retain bacteria and leaving hands damp increases the growth of micro-organisms).
- ▶ Use a sink that is solely for washing hands; it is particularly important that hand-washing is not carried out in sinks that are used for food preparation (this avoids cross-contamination).
- ▶ Re-wash your hands whenever you are interrupted during the food-handling process, and after you touch your hair, nose, mouth or body.



Source: Reproduced with permission of NSW Health.

Watch this video for a demonstration of effective hand-washing.

When you wash your hands, you are removing dirt and germs. You also choose to use an antibacterial hand cream or gel instead washing hands, particularly when water and soap is unavailable. these gels also avoids your hands becoming cracked and dry from excessive washing.



Be aware that these antibacterial solutions are only effective if there is no residue on the hands, as they only act to kill bacteria, not to remove the residue. Therefore, if you are handling food and food is on your hands, you need to wash them with soap and water first.

### **For best effect, you must wash your hands:**

- ▶ on arrival at the service
- ▶ before and after handling different types of foods
- ▶ after going to the toilet
- ▶ after wiping your nose
- ▶ after cleaning or using chemicals
- ▶ before eating, preparing or serving food or infant formula, and during this time if items other than the utensils and food are touched
- ▶ after taking protective gloves off
- ▶ before going home.

## **Protective clothing**

While working in the kitchen, you should wear safe and clean clothing that addresses cleanliness, safety and contamination.

### **Cleanliness**

Wear clothing that is washed daily and changed when dirty. This includes your shoes, which may need cleaning if they become soiled. Wearing an apron can help you keep your clothing cleaner and also allows you to change easily if the apron becomes soiled.

### **Safety**

Wear clothing that keeps your body safe and free from bacteria. Shoes should be closed in and non-slip. Sleeves should be short or close-fitting to ensure they do not drape into food or come into contact with hot surfaces. Hair should be tied back or held in place with a cap or hat so it does not fall into food.

### **Contamination**

If you wear disposable gloves, remember to change them regularly because a glove becomes contaminated and grows bacteria just as a hand does. Wash and dry your hands prior to putting on gloves.

Wearing gloves does not automatically mean you are being hygienic.

It is necessary to change gloves:

- ▶ if they become contaminated
- ▶ if they tear or get a hole
- ▶ when switching between raw and ready-to-eat food
- ▶ when changing tasks
- ▶ after cleaning
- ▶ if you handle rubbish
- ▶ if you touch any other surface, object or person, including your own body.

## Child hygiene

Children can participate in some food-preparation tasks. Encourage them to follow your modelling and wash their hands at the appropriate times. Ensure the equipment they use is appropriate and that they have easy access to what they need. The hygiene practices of children should be the same as yours.

You may find gentle reminders and encouragement make hygiene practices fun and positive.



### Some strategies you could use to do this include:

- ▶ talking about the importance of hygiene
- ▶ singing songs or reciting poems – make up a hand-washing song (for example, to the tune of ‘Twinkle twinkle little star’)
- ▶ using clear, colourful posters
- ▶ using positive language
- ▶ encouraging and reminding children to wash their hands
- ▶ ensuring equipment is within reach.

## Clean environments

Adequate cleaning practices include cleaning equipment prior to disinfecting. Disinfection processes focus on killing micro-organisms rather than removing dirt. Hot water and soap or detergent successfully removes dirt; however, disinfecting these items ensures micro-organisms are also removed.

There is a range of environmentally friendly products available in a variety of forms; for example:

- ▶ Tabletops and benches can be cleaned using a solution of equal parts vinegar and water with a few drops of detergent in a spray bottle.
- ▶ Basins can be cleaned using a sprinkle of bicarb soda, rubbing with a soft cloth and rinsing with water.

There are also many chemicals that can be used to disinfect, such as bleach. Bleach requires careful preparation to the manufacturer’s specification; however, it only maintains its disinfecting qualities for 24 hours, so disinfection should occur daily. The most common dilution is one part bleach to nine parts water.

Sunlight and drying in the sun are also effective disinfectants; fresh air, together with the ultraviolet rays in sunlight can help to kill micro-organisms. Extreme temperatures of below freezing or above 60°C are also effective disinfectants.

The method chosen to disinfect must suit the item or equipment. It is also sensible to use chemicals when children are not close by, as they can inhale or make contact with chemicals that are sprayed onto surfaces. These interactions with chemicals may cause reactions such as asthma, dermatitis or even anaphylaxis.

## Pest control

Another part of the cleaning process is ensuring pests are controlled.

<b>Some of the pests you may need to control include:</b>	
▶ cockroaches	▶ ants
▶ mice	▶ moths
▶ rats	▶ weevils
▶ flies	▶ spiders.

To maintain a pest-free environment, take the following steps:

- ▶ Keep the kitchen and rubbish area clean, and ensure playrooms or staff areas are kept clean and free of food scraps.
- ▶ Check for signs of pests; for example, droppings, nests, nibbled items or smells.
- ▶ Remove access to food and water by blocking entries, removing items and storing items safely.
- ▶ Cover and store all food securely.
- ▶ Fix dripping taps.
- ▶ Remove rubbish from the kitchen and other inside areas and ensure rubbish bins are cleaned regularly.
- ▶ Store dry foods in containers.
- ▶ Ensure doors fit well in door frames.
- ▶ Fit flywire to windows.
- ▶ Repair holes in floors or walls, including any cracks or cavities.
- ▶ Repair any broken plumbing and broken floor grates.

Most organisations use preventative measures, such as keeping the environment clean and hygienic prior to being faced with a pest problem that is difficult to manage. However, if your organisation has a pest-control issue, you may need to hire a pest-control service.

## Food care

Food can provide an ideal environment for bacteria to grow. Bacteria are micro-organisms that can cause disease. Bacteria that are commonly found on skin and in the environment can cause food poisoning if allowed to grow in large numbers. These bacteria can be passed from person to person via food. For example, if a food handler is ill, there is an increased risk of them infecting food during food preparation, cooking or cleaning processes. It is important to avoid cooking or serving food if you are sick. Organisations where staff members are responsible for both changing nappies and handling food have over three times as many cases of diarrhoea as centres where different staff members perform each task. For this reason, the person who prepares and serves food should not change nappies or help children go to the toilet on that day.

There are many guidelines that should be followed to prevent cross-contamination of foods and ensure food is safe to eat; for example:

- ▶ To prevent cross-contamination between raw and cooked foods:
  - keep raw and cooked foods separate
  - use separate utensils, chopping boards and surfaces for raw and cooked foods
  - wash your hands between touching different types of food.
- ▶ Ensure raw food cannot drip onto or make contact with anything else in your refrigerator. One way to do this is to store raw meat on the bottom shelf. You can also include a specific place for defrosting foods so the defrosting process does not contaminate other foods.
- ▶ Bacteria grow very quickly when food is kept between 5°C and 60°C. This is known as the ‘danger zone’. Avoid keeping food in the danger zone; instead, keep chilled foods below 5°C and hot foods at or above 60°C.
- ▶ When heating food, it must reach at least 75°C to kill bacteria. To do this you must ensure that food is thoroughly cooked – right through to the middle – and that the centre of the food reaches 75°C. Once cooked, ensure the food is kept above 60°C.
- ▶ Check that food has cooled enough before giving it to a child. Remove a small piece of food with a spoon to another plate and test the temperature with your hand. Throw this piece of food away and get a clean spoon. Never blow on a child’s food as a means of cooling it down; this spreads your germs onto the food.
- ▶ Ensure food is not left outside a fridge for more than one hour.
- ▶ Throw leftover food away; never return leftover food to parents.
- ▶ Only heat food and milk once.
- ▶ Keep a thermometer in your fridge so you can check that your cold food is below 5°C prior to eating or cooking it.
- ▶ Keep frozen food solid and at –15 °C. If it thaws, do not refreeze it; cook it instead.
- ▶ Ensure all fridges, freezers and cool rooms have working thermometers.
- ▶ Thaw frozen items in the refrigerator; never leave food on a bench or sink and never thaw food in water.

### There are some foods that grow bacteria easily, including:

▶ meat, including poultry and cold meats	▶ egg products, such as quiche
▶ dairy products	▶ cooked pasta
▶ eggs	▶ salads and coleslaw
▶ seafood	▶ fruit salad and cut fruit.
▶ cooked rice	

Take particular care when handling these foods to avoid food poisoning. The following are bacteria that can cause food poisoning.

#### Salmonella

Found in meat, poultry, eggs and egg products. Causes nausea, vomiting, diarrhoea, fever and headache.

#### Bacillus cereus

Found in meat, cereals, rice and packet soup. Causes nausea, vomiting, diarrhoea and stomach cramps.

#### Campylobacter

Found in raw meat, raw poultry and raw unpasteurised milk. Causes diarrhoea, abdominal pain, nausea, headache and muscle pain.

#### Staphylococcus aureus

Found in meat, poultry, egg products, mayonnaise-based salads and cream- or custard-filled desserts. Causes diarrhoea, fever, abdominal pain, nausea, headache and muscle pain.

## Food from home

Each organisation should have a procedure regarding how to handle food brought from home. Parents at your service may provide meals or special items, such as birthday cakes. In each situation, your service procedures must be followed to ensure all children are protected from unsafe foods.

Food brought from home should be clearly named and dated so you know where it came from and when it came into your organisation. This procedure is just as important when bottles and drinking cups are brought from home. It is also useful if parents identify the ingredients in case of allergies and food intolerances.

## Milk feeds

All bottles must be clearly labelled and have a protective cap or lid covering the teat. The bottles and teats should look clean and be in good condition, and their contents should be only breastmilk, formula or water. Encourage parents to transport bottles in a cooler to ensure the contents do not develop bacteria.

Some infants will drink cold milk, but most prefer their milk warm. The safest way to warm the milk is by placing it in a jug of hot (not boiling) water.

Never use a microwave to heat breastmilk as it damages the nutrient content of the milk. In addition, microwaves distribute heat unevenly, and there is a danger that a child may be scalded as the water in the milk turns to steam and collects at the top of the bottle.

After heating milk, shake the bottle well, then check the temperature by squirting a small amount of milk onto your wrist. The milk should feel the same temperature as your skin.

Be aware that breastmilk looks unusual – it separates into layers that mix together again once it is shaken. It is okay if these layers are present, and you should feel confident that the milk is fine for the infant if you adhere to the following guidelines.

- ▶ Breastmilk cannot be kept for long periods and will only last up to 48 hours in the refrigerator, or up to three months in the freezer.
- ▶ Breastmilk can be stored in the fridge for up to 24 hours after it has been defrosted.
- ▶ Breastmilk can be supplied in small amounts to prevent wastage; ice-cube-sized portions work well.
- ▶ Breastmilk must be warmed carefully. Do not put it in boiling water as it will curdle. Instead, place the bottle containing breastmilk in a container of cool water and slowly add warmer water until the milk reaches the right temperature.

Breastmilk is best for infants because it has immunity-building properties that help prevent illness. If you have infants at your organisation who are being breastfed, encourage their mothers to provide expressed breastmilk or to visit to breastfeed their infant as required. You can support mothers who choose to do this by having a positive attitude, being aware of their emotional wellbeing and helping them with time management. You can also support them by providing pleasant, private areas where they can feed.

Formula is the next best option for infants. Formula contains all the vitamins and minerals that an infant needs; however, it does not contain the immunity-building properties that breastmilk contains. When preparing formula, follow the manufacturer's instructions carefully and never re-freeze or re-heat leftover formula; dispose of it in the appropriate manner.

Watch this video to learn about hygienically preparing bottles for infants.



## Healthy eating spaces

Just as important as safely handling food is providing children with safe and hygienic eating spaces.

### Use the following guidelines to create hygienic eating spaces:

- ▶ Before meals, clean all food surfaces, including tables and benchtops used to serve food.
- ▶ Food preparation areas include serving benches and trolleys as well as eating surfaces, so pay attention to hygiene and safety in all these places.
- ▶ Check that all children's hands are washed before they eat or drink. This is important before all meals and especially when children are serving themselves.
- ▶ Teach children to turn away from food when they cough or sneeze, and then to wash their hands before touching food.
- ▶ Make sure children do not share food, plates or utensils.
- ▶ If children are selecting food from a shared bowl or plate, they should use a spoon or tongs because germs and bacteria can pass from hand to food.
- ▶ Remind children that if they share food they may spread germs that could make them or other children sick.
- ▶ If you have a break in between preparing or serving food, remember to wash your hands before beginning again.
- ▶ Use a separate spoon for each infant you feed.
- ▶ If a child drops their spoon, get them a new one – rinsing it under a tap does not kill all the germs.

## Practice task 6

1. Demonstrate to your trainer the correct technique for hand-washing.
2. In the National Health and Medical Research Council publication, *Staying healthy: preventing infectious diseases in early childhood education and child services*, it is recommended that if a celebration includes blowing candles out, this should not occur on a cake that is to be shared with others. Why is this recommended? If your service does not have a copy of this document, you can access this resource online at: <http://aspirelr.link/nhmrc-staying-healthy>

3. This checklist identifies some ways to prevent food poisoning. These points should be part of your usual policy and procedures.

Add two more points to the checklist, then tick off those that are included as part of your usual workplace practice:

- Use good personal hygiene
- Avoid cross-contamination
- Cook foods thoroughly
- Avoid temperature danger zones
- Throw out spoilt food
- \_\_\_\_\_
- \_\_\_\_\_

## Summary

- ▶ All staff should assist to develop and maintain food safety procedures.
- ▶ Following hand-washing procedures is essential for preventing the spread of infection, especially when handling food.
- ▶ Food safety policies and procedures must be followed when carrying out food preparation, handling and storage.

# Learning checkpoint 3

## Handling food safely

Read the case study, then complete the questions that follow.

### Case study

Melanie works in a childcare organisation. Her job is to prepare and serve the children their snacks and lunch. Last night, Melanie became unwell with stomach cramps and today she is still feeling ill.

Melanie starts work and goes straight into the kitchen to start chopping fruit for the morning snack. While doing so, she remembers she needs to chop chicken for the children’s lunch. Melanie moves some of the fruit off the board and uses the board to cut up the chicken. She places the chicken pieces back on the top shelf of the fridge, then gets back to cutting the fruit on the board.

Just as Melanie is about to pick up the finished fruit plate, she sneezes, making sure she does not sneeze on the plate of food. She blows her nose, then puts her tissue in the bin and takes the fruit to serve to the children.

Melanie is planning to have the children thread the pieces of fruit onto a small skewer as a simple cooking experience. She calls the children in from play and gets them to sit at the table. She shows them how to thread by choosing a piece of fruit from the large platter, picking it up and threading it on the skewer.

The children are excited to participate. George wants to have orange on his fruit kebab, but when he picks it up he realises it is too squishy and replaces it on the plate. He chooses a piece of kiwi fruit instead and threads it. He pushes it too hard and it breaks off, falling onto the floor. Melanie says she will help him. She picks up the kiwi fruit and threads it onto George’s skewer. George quickly eats the kiwi piece and asks Melanie to thread another piece of fruit for him.

Melanie’s supervisor is concerned about Melanie’s actions. He realises that the food policy has not been reviewed for some time.

1. List the actions that Melanie did to breach food-handling procedures.

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2. What should she have done in each case?

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3. If you were providing this cooking experience, what four safe food-handling actions would you expect the children to follow?

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4. Who would you tell if you noticed there were missing actions in the service procedure?

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