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National Healthy School Canteens Trainer’s Manual
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Trainer’s Manual
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Introduction

The aim of this training workshop is to provide school canteen managers with the opportunity to develop the skills and understanding necessary to use the National Healthy School Canteens (NHSC) food categorisation system.

Learning objectives of the training

On completion of the training participants will be able to:

• design a canteen menu in line with the NHSC food categorisation system, and
• assess individual manufactured food products against the nutrition criteria.

The training is designed to be delivered as a 3-hour workshop (exclusive of breaks).

Training resources

• Guidelines for healthy foods and drinks supplied in school canteens
• Quick Reference flip chart
• Poster (Healthy kids need healthy canteens!) x 3
• Training PowerPoint presentation (CD)
• Trainer’s Manual
• Participant’s Workbook
• Food Safety Fact Sheet

Additional materials to assist communicating changes to the school community

• Program briefing PowerPoint presentation and notes (CD)
• Pocket Guide

Individual training sites will need to provide:

• The Australian Guide to Healthy Eating poster
• Healthy Eating for Children brochure
• Food labels for hands-on activities (CD)
• Evaluation forms (samples are provided for photocopying in Appendix 1)

Each jurisdiction will need to provide participants with local nutrition support contact details on the day of training.
Workshop content

The content of the workshop includes the following.

- The background of the project – why it was developed and why it is a national project
- Purpose of the training course – what participants can expect to take away from the training
- Nutrition basics – to ensure that all participants have an understanding of the fundamentals of nutrition
- Food labelling – to ensure participants have an understanding of the key elements of a food label
- The NHSC food categorisation system – to explain the system and how to use the
- NHSC Guidelines for healthy foods and drinks supplied in school canteens
- Special dietary and cultural needs – to introduce some of the other issues that might need to be considered when designing canteen menus.

This training program recognises that most school canteen managers have undertaken some training which may vary from ad hoc workshops and conferences to Certificates in Canteen Management delivered by the Vocational Education and Training (VET) sector. As a result, they will have varying levels of understanding of nutrition basics. With this in mind, training activities are designed to engage participants in discussions and hands-on activities that recognise and make use of their prior learning. Throughout this workshop, practical application of existing and newly acquired knowledge is embedded in the activities.

Activities marked with this symbol involve brainstorming and group discussion.

Activities marked with this symbol involve group work and problem solving.

Website links for further reading at the end of each section

There are many aspects of running a school canteen, such as costing and promoting a menu. However, the NHSC training workshop will focus on how to use the NHSC food categorisation system so that canteen managers can apply the system in their canteen. These guidelines are not designed to incorporate other school activities such as fundraising.
Formal Assessment – Vocational Education and Training

The content of the training workshop incorporates relevant elements of the Australian Quality Training Framework (AQTF) competencies outlined in the Tourism, Hospitality and Events Training package (SIT07) unit SITHCCC035A Develop menus to meet special dietary and cultural needs. Participants will be provided with a Workplace Implementation Project (the Project) that provides them with a framework and checklist to guide them through the process of implementation. The project also allows them to document skills already demonstrated over many years, as well as the new skills gained as a result of participating in the NHSC workshop.

An additional benefit of completing the Project is the option of obtaining a nationally recognised Statement of Attainment for the above unit of competency, if the evidence supplied meets the assessment requirements. Please note that if participants wish to gain a Statement of Attainment for the unit of competency they will need to contact a Registered Training Organisation (RTO) accredited to issue a Statement of Attainment for that unit. They will also need to meet that organisation’s assessment requirements. (See Appendix 2 for Assessor Guidelines.)

Some further reading and additional activities may be required to complete the Project. To assist participants to complete the Project, the Participant’s Workbook contains:

• relevant website links for further reading at the end of each section
• instructions on how to use the FSANZ Nutrition Panel Calculator, and
• example Student Survey Questionnaires.

Further information about SITHCCC035A Develop menus to meet special dietary and cultural needs can be found at the National Training Information Service website: http://www.ntis.gov.au/Default.aspx?/trainingpackage/SIT07, viewed 6 May 2010.
Workshop session plan

The 3-hour workshop covers the theory and justification of the role of the school canteen in the health of children and contains practical application of planning menus based on the nutrient criteria.

<table>
<thead>
<tr>
<th>Session</th>
<th>Content</th>
<th>Activities</th>
<th>Time allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>• Welcome participants</td>
<td>• Discussion regarding the definition of a healthy canteen</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Background to the National Healthy School Canteens Project</td>
<td>• Provide brief overview of the background to the NHSC project</td>
<td>• Discussion on factors influencing the requirements of canteen customers</td>
<td>30 minutes</td>
</tr>
<tr>
<td></td>
<td>• Identify the purpose of the training workshop</td>
<td>• Classifying fats as saturated or unsaturated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Outline workshop learning outcomes and schedule</td>
<td>• Reading ingredient lists on food labels</td>
<td></td>
</tr>
<tr>
<td>Topic 1: Nutrition basics</td>
<td>• Define nutrition</td>
<td>• Discussion on factors influencing the requirements of canteen customers</td>
<td>60 minutes</td>
</tr>
<tr>
<td></td>
<td>• Identify 6 major classes of nutrients</td>
<td>• Classifying fats as saturated or unsaturated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Food labelling</td>
<td>• Reading ingredient lists on food labels</td>
<td></td>
</tr>
<tr>
<td>Break</td>
<td></td>
<td></td>
<td>10 minutes</td>
</tr>
<tr>
<td>Topic 2: The NHSC food categorisation system</td>
<td>• Introduce The Australian Guide to Healthy Eating and Dietary Guidelines as the basis for the NHSC guidelines</td>
<td>• Sorting foods into GREEN, AMBER and RED categories</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Explanation of The Australian Guide to Healthy Eating recommended serves and serving sizes</td>
<td>• Assessing food items against the NHSC criteria</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Overview of the NHSC food categorisation system</td>
<td>• Discussion on ways to move the menu toward the 'GREEN' end of the traffic light spectrum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• How to handle foods and drinks categorised as AMBER</td>
<td>• Discussion on how to incorporate variety into the school canteen menu</td>
<td></td>
</tr>
<tr>
<td>Break</td>
<td></td>
<td></td>
<td>10 minutes</td>
</tr>
<tr>
<td>Topic 3: Special dietary and cultural needs</td>
<td>• Distinguish between food allergies and food intolerances</td>
<td>• Discussion on the role of the school canteen with regard to special dietary needs</td>
<td>30 minutes</td>
</tr>
<tr>
<td></td>
<td>• Identification of some of the cultural and religious influences on food choice</td>
<td>• Discussion on catering for cultural needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Looking after our planet – suggestions on how to make the menu ecologically friendly</td>
<td>• Discussion around ideas for ethnic food days</td>
<td></td>
</tr>
<tr>
<td>Where to from here?</td>
<td>• Summary</td>
<td>• Outline requirements for gaining a Statement of Attainment</td>
<td>20 minutes</td>
</tr>
</tbody>
</table>
Background to the National Healthy School Canteens Project

The NHSC project has its origins in 2004 when it was agreed at the Australian Health Ministers Conference that the Australian Health Ministers Advisory Council would work with the National Obesity Taskforce (NOTF) to promote healthy school canteens. In 2006 the Council of Australian Governments (COAG) launched the Australian Better Health Initiative (ABHI), which was supported by the Australian Health Ministers. This initiative included funding for the NHSC project, to incorporate some of the principles and standards endorsed by the NOTF, primarily to promote good health through healthy eating to reduce levels of obesity and chronic diseases later in life, and in a broader context to take into account the principles of the World Health Organization’s Health Promoting School Strategy (WHO, 1998). The NHSC project commenced in 2008. In the meantime, however, many states and territories, starting with NSW in 2005, had introduced guidelines for healthy school canteens. While they have a similar intent and bear many similarities, these guidelines vary from state/territory to state/territory. The NHSC project has developed a set of nationally consistent guidelines that harmonise practice across Australia.

The nutritional status of Australian school children

Much attention has been focused recently on the prevalence of obesity in Australian children. Data from a number of national and state/territory surveys indicate that the prevalence of overweight and obesity has increased steadily from around 10% in 1985 to approximately 20% in 1995, when the first National Nutrition Survey (ABS 1995) was conducted, and appears to have peaked at 25% in 2003/04 as reported by the Sentinel Site for Obesity Prevention in Victoria, (Catford & Caterson 2003). The most recent survey, the Australian National Children’s Nutrition and Physical Activity Survey (DoHA 2008) conducted in 2007, showed that 72% of children are in the healthy weight range. Of the 28% who are outside the healthy weight range, approximately one in four children are overweight or obese, while 5% are underweight.

Children who are overweight or obese have an increased risk of being obese in adulthood, which in turn may increase their risk of a number of chronic diseases such as coronary heart disease, some cancers and Type 2 diabetes. Type 2 diabetes, which used to be called ‘mature onset’ diabetes because it was usually only seen in older adults, is now being diagnosed in obese teenagers.

Other findings from the 2007 National Children’s Nutrition and Physical Activity Survey (DoHA 2008) revealed that, overall, children were not consuming the recommended amount of fruit, vegetables or calcium. A third of a child’s daily energy intake occurs during school hours and a significant proportion of the fruit and calcium the children did consume was during school hours. Interestingly, only 17% of total vegetable intake was during school hours, suggesting an opportunity to increase promotion and thereby consumption of vegetables during this time.

While poor diets may contribute to an increased risk of chronic disease in the long term, in the short term they have a direct effect on children’s performance in school and can contribute to lower academic achievements and behavioural problems.

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1 COAG is the peak intergovernmental forum in Australia, comprising the Prime Minister, State Premiers, Territory Chief Ministers and the President of the Australian Local Government Association
The healthy school canteen

Schools are ideally placed to deliver healthy lifestyle messages to children. Health promoting schools ‘practice what they preach’ by ensuring food and drink supplied by the school canteen is consistent with, and supports, the health and wellbeing messages taught in class. The aim is to create an environment where the healthy choice is the easy choice.

The school canteen is an obvious place to promote an enjoyment of healthy eating. For students who use the canteen regularly, the food purchased makes a significant contribution to their total food intake and nutrition. Therefore, it makes sense to ensure the best food possible is available to enhance their ability to learn and take in the information presented to them in class. For students who don’t use the canteen regularly, the canteen still plays an important educational role by modelling healthy eating habits.

The canteen also plays an important role within the broader school environment – that of reinforcing knowledge, skills and behaviours about healthy eating and lifestyle which are taught in the classroom. Food provided at school has a considerable influence on the development of children’s long-term eating habits, food preferences and attitudes towards food.

The school canteen plays a vital role in promoting healthy foods and creating a school culture of healthy eating.

Group discussion: Healthy school canteens

| What is a healthy school canteen? |

(SLIDE 13/Participant’s Workbook p.4)

Have participants brainstorm as a large group the definition of a healthy school canteen.

Acknowledge, but do not engage in a discussion of each answer.

The purpose of this activity is simply to demonstrate that there is no single definition of a healthy school canteen. The training session will address the different aspects of healthy eating and healthy canteen menus. The training begins with some basic nutrition information so that everyone will have a similar understanding by the end of the day.
Web resources

Australian Health Promoting Schools Association
This website provides background information and resources on the health promoting schools approach.

National Obesity Taskforce Paper: Healthy weight 2008: Australia’s Future:
The National Action Agenda for Children and Young People and Their Families
This is the national plan to address the rising rates of overweight and obesity in a nationally coordinated approach.

Preventative Health Taskforce Strategy
This strategy has been developed to tackle the burden of chronic disease, including obesity in Australia, with the view of making Australia a healthier country by 2020.

2007 Australian National Children’s Nutrition and Physical Activity Survey – Main Findings
This survey assessed the food, nutrient intake and physical activity levels of children aged 2-16 years in Australia. Participants weight, height and waist circumference were also measured.
**Topic 1: Nutrition basics**

*(SLIDES 14–26)*

**Definition of nutrition**

The study of components in foods, called nutrients, and how they are ingested, digested, absorbed, transported and used, including how they interact and how they are stored and excreted.

While obviously important, nutrition is not the only factor that influences our food choices and what we eat.

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**Group discussion: Circumstances that affect eating habits**

*(SLIDE 16/Participant’s Workbook p.6)*

What factors influence the requirements of canteen customers?

Have the participants consider the photos on SLIDE 16 and identify how these and other physical, social and cultural factors influence what a child eats.

Ask them if they think the canteen menu can potentially influence children’s eating habits as canteen customers.

The purpose of this activity is to demonstrate that food choices are influenced by a variety of factors, some of which need to be considered when planning canteen menus. Planning canteen menus to incorporate special dietary needs, trends and cultural needs is addressed in Topic 3.

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**The Australian Guide to Healthy Eating (AGTHE)**

The *AGTHE* aims to encourage the consumption of a variety of foods from each food group every day in proportions that are consistent with recommendations in the *2013 Australian Dietary Guidelines*.

Foods are grouped together into the following food groups on the basis of their nutrient similarity:

- Vegetables and legumes
- Fruits
- Dairy and alternatives
- Meat and alternatives
- Grains and cereals
Nutrients are substances from foods that the body uses to maintain life and to grow and repair tissues. There are six major classes of nutrients:

1. **Proteins**: found in meat, dairy, legumes, nuts, seafood and eggs.
2. **Carbohydrates**: found in fruit, pasta, rice, cereals, breads, potatoes, milk and sugar.
3. **Lipids**: commonly called fats, and found in oils, butter, margarine, nuts, seeds, avocados, olives, meat and seafood.
4. **Vitamins**: includes the water soluble B group vitamins and vitamin C and the fat soluble vitamins, A, D, E and K.
   a. Fruits and vegetables are generally good sources of Vitamin C, A and folic acid (B group vitamin).
   b. Grains and cereals are generally good sources of the B group vitamins and fibre.
   c. Full-fat dairy and egg yolks are generally good sources of the fat soluble vitamins, A, D and E.
   d. Milk and vegetable or soya bean oils are generally good sources of vitamin K, which can also be synthesised by gut bacteria.
5. **Minerals**: includes sodium, calcium, iron, iodine and magnesium.
   a. Milk and dairy products are a good source of calcium and magnesium.
   b. Red meat is a good source of iron and zinc.
   c. Seafood and vegetables are generally a good source of iodine.

Vitamins and minerals are support nutrients. They are needed in small amounts to promote and regulate the chemical processes needed for growth and the maintenance of good health.

6. **Water**: Water is considered an essential nutrient, forming part of the cells of the body. It also helps maintain blood volume, aids in regulating the temperature of the body and is used as a medium to transport substances. Most of the water in the body needs to be provided in the diet. This includes the foods we eat (for example, fruits are mostly water) as well as what we drink.

These days nutritionists are interested in a 7th category of substances in foods, which, while not classed as essential nutrients, are known to play important roles in promoting optimal health and reducing the risk of chronic disease. These are called **phytochemicals** and are found in plants (phyto = plant). There are hundreds of them, some of the most well known are beta-carotene, lycopene and phytosterols. Phytochemicals vary in their chemical composition and each one has one or more specific function in the body.

### Energy

Energy is not a nutrient, but comes from carbohydrates, proteins and lipids. The unit of energy used in Australia is the kilojoule. The conversion is 4.2kJ = 1Cal

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Kilojoules/gram</th>
<th>Calories/gram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbohydrate</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Protein</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Lipids (fats and oils)</td>
<td>37</td>
<td>9</td>
</tr>
</tbody>
</table>
Proteins
Proteins are the building blocks of the human body. The body uses them to make its own proteins (for example: enzymes, hormones, antibodies, collagen etc.). Proteins are made of a chain of molecules known as amino acids. In the body, we need 20 different amino acids to make the proteins required. Amino acids are obtained from eating a variety of foods from animals and plants. Only animal foods contain all the amino acids needed by the body in sufficient quantities. Plants contain a variety of amino acids as well. However, they are often deficient in one or more amino acid. For those people who do not eat animal protein, this is not a problem, as long as a wide variety of plant foods are consumed across the day.

Examples of non-animal protein combinations which provide all of the essential amino acids include, corn and legumes (for example: Mexican bean enchilada), or cereal and legumes (for example: Asian Tofu and rice or Australian baked beans on toast).

Carbohydrates
Carbohydrates consist of ‘simple’ sugars (monosaccharides and disaccharides) and starches (polysaccharides or ‘complex’ carbohydrates). Once eaten, carbohydrates are broken down to glucose and used for energy by the body. This group of foods (bread, rice, pasta, grains, some vegetables, legumes, milk and fruit) are good sources of nutrients, as well as energy.

Carbohydrates can be classified as:

Monosaccharides (one sugar molecule)
- glucose (also called dextrose)
- fructose (fruit sugar)
- galactose (formed during the digestion of milk)

Disaccharides (two sugar molecules)
- lactose (glucose and galactose)
- sucrose, better know as table sugar (glucose and fructose)
- maltose (two molecules of glucose)

Polysaccharides (three or more sugar molecules)
- foods made up of polysaccharides may contain thousands of sugar molecules and are sometimes referred to as ‘starchy’ foods (for example: bread, cereals, rice, potato, pasta and some legumes).

Sugar
It is important to monitor the amount of added sugar in foods such as refined cereals. Naturally occurring sugars in foods are not a problem (for example: lactose in milk or fructose in fruit). However, when sugars are extracted from their natural source they are devoid of nutrients, and in excess, replace other valuable nutrients in the diet and provide excess kilojoules. Added sugar is not always just white table sugar.

Some products contain more than one type of added sugar. All sugars have the same amount of kilojoules no matter where they are derived from.

Some common names for added sugar used on labels in Australia include brown sugar, dextrose, fruit juice concentrate, fructose, glucose, golden syrup, honey, lactose, malt extract, maltose, modified carbohydrate, molasses, maple syrup, raw sugar, sucrose.
Fibre

Fibre is a type of carbohydrate that humans cannot digest using the normal digestive acids and enzymes in the stomach and small intestine and is found in plant foods such as vegetables, fruits, legumes and cereals. There are two major categories of fibre, soluble and insoluble. Bacteria in the large intestine can break down some types of fibre (mostly soluble) and produce by-products like gas and a small amount of healthy fats (small chain fatty acids). Fibre absorbs water and increases the bulk of stools (‘poo’), making them moist and easy to pass. In addition, fibre helps excrete cholesterol, promotes ‘healthy’ bowel bacteria, delays the digestion of simple sugars and promotes a feeling of fullness. Population studies linking the increased consumption of fibre from whole grains to a reduction in the risk of cardiovascular disease, Type 2 diabetes and colon cancer have shown consistent results (CSIRO 2009).

Fats and oils (lipids)

Most people refer to lipids as fats. Fats are solid at room temperature and oils are liquid at room temperature. Lipids are further classified as saturated or unsaturated. This classification is according to their chemical structure. All fats contain a mixture of saturated and unsaturated fats but their overall classification is determined by the type of fat that is the predominant fat. The saturated fats are often referred to as ‘bad fats’ as they are known to contribute to plaque formation in the arteries and the prevalence of cardiovascular diseases. The foods high in saturated fats are meats, cold meats, butter, cheese, yoghurt, milk, coconut milk and cream and palm oil (which is often disguised as vegetable oil on food labels).

The unsaturated fats can further be divided into monounsaturated and polyunsaturated fats. These are considered the healthy fats and are listed in the table below. Foods containing a high proportion of unsaturated fats include plant foods (except coconut and palm), eggs, lean meat and fish. The omega fats, omega-3 and omega-6 fats are polyunsaturated fats. Lipids contribute more than twice as many kilojoules per gram as either protein or carbohydrates.

All lipids have the same amount of kilojoules no matter where they are derived from.

Some common names for fats used on labels in Australia include animal oil, beef fat, butter fat, cphoa, lard, milk solids, palm oil, shortening, tallow, vegetable oil.

<table>
<thead>
<tr>
<th>Type of healthy fat</th>
<th>Food source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monounsaturated fat</td>
<td>Olive oil, peanut oil, canola oil, avocados, nuts and seeds</td>
</tr>
<tr>
<td>Polyunsaturated fat</td>
<td>Vegetable oils (such as safflower, corn, sunflower, soy and cottonseed oils), nuts and seeds</td>
</tr>
<tr>
<td>Omega-3 fatty acids</td>
<td>Oily, cold-water fish (such as salmon, mackerel and herring), flaxseeds, flax oil and walnuts</td>
</tr>
</tbody>
</table>
Activity: Nutrients of interest

(SLIDE 24/Participant’s Workbook p.7)

What foods contain mostly saturated or unsaturated fats?

Have participants go to the table on page 7 of their workbook and indicate which type of fat is the predominant fat in each of the foods listed by ticking the appropriate box.

Highlight the answers and ask if there were any fats that they were unsure how to classify. Some points to highlight at the end of this activity:

- Coconut oil and palm oil, although from plant sources, are high in saturated fats.
- Most table margarines these days are predominantly unsaturated fats, although some margarines are high in saturated fat.
- Nuts and seeds are good sources of unsaturated fats, although they should not be eaten in excess as they are relatively high in total fat and therefore energy.
- Game meats, such as kangaroo and rabbits are lean meats (low in total fat) and what fat they have, is mostly polyunsaturated because of the types of food these animals eat and the amount of energy they expend foraging for foods.
- Unspecified vegetable oils (that is, those simply labelled vegetable oil unless identified as being sunflower or safflower etc.) are likely to be palm oil and therefore will be predominantly saturated fats.

<table>
<thead>
<tr>
<th>What foods contain mostly saturated or unsaturated fats? (Workbook, p.7)</th>
<th>Saturated</th>
<th>Unsaturated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avocado</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canola oil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheese</td>
<td></td>
<td></td>
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<tr>
<td>Coconut cream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coconut milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cream</td>
<td></td>
<td></td>
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<tr>
<td>Fatty meat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Game meat (e.g. kangaroo, rabbit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Margarine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuts</td>
<td></td>
<td></td>
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<tr>
<td>Olives</td>
<td></td>
<td></td>
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<tr>
<td>Olive oil</td>
<td></td>
<td></td>
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<tr>
<td>Palm oil</td>
<td></td>
<td></td>
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<tr>
<td>Seeds</td>
<td></td>
<td></td>
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<tr>
<td>Sunflower oil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetable oil (no specification)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other nutrients of interest

Sodium intake

In terms of menu planning, another nutrient that we need to pay attention to is sodium, because over consumption may contribute to the incidence of high blood pressure. The National Children’s Nutrition and Physical Activity Survey found that consumption of sodium in all age groups exceeded the recommended upper level of intake (DoHA 2008).

Sodium occurs naturally in food. However, most sodium consumption comes from processed foods as well as being added to food through table salt (sodium chloride). The function of sodium in the body, along with potassium, is to control the pressure and volume of blood and to balance the water content inside body cells.

Some common names for salt/sodium used on labels in Australia include baking soda, celery salt, garlic salt, monosodium glutamate (may appear as MSG or z621), rock salt, sea salt, sodium bicarbonate.

Calcium

Calcium is important for healthy bones and teeth. You may have heard the term ‘peak bone mass’. This refers to the greatest amount of bone that you have in your lifetime. Peak bone mass is achieved somewhere between the ages of 16 and 30. Because most bone is formed in childhood and adolescence, calcium is an important nutrient for children. Low calcium intake has been associated with low bone mass, which often results in bone fractures later in life (osteoporosis).

The recommended dietary intake (RDI)\(^2\) for school children aged 9-18 years is 1000mg– 1300mg of calcium a day. The most recent National Children’s Nutrition and Physical Activity Survey identified calcium as a nutrient at risk, especially in older children. Older children (9-16 years) were least likely to meet the estimated average requirements (EAR)\(^3\) of 800mg–1050mg of calcium daily (DoHA 2008). In the 12-13 year old age group almost 70% of all children did not meet the EAR\(^3\). This figure rises to almost 90% if we look at girls aged 12-13 years in isolation.

Dairy products are the best source of calcium in the diet. Other good sources of calcium include fortified soy products (milk, yoghurts) and fish with bones (salmon and sardines).

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\(^2\) RDI – The average daily dietary intake level that is sufficient to meet the nutrient requirements of nearly all (97–98%) healthy individuals in a particular life stage and gender group

\(^3\) EAR – A daily nutrient level estimated to meet the requirements of half the healthy individuals in a particular life stage and gender group (NHMRC 2006)
Food labelling
(SLIDES 27–33)

In order for participants to be able to apply the NHSC nutrient criteria, it is important that they have a common understanding of the key elements of a food label and are able to read a Nutrition Information Panel (NIP).

Food labels contain a lot of information. Manufacturers have to follow specific rules for labels and this is monitored by FSANZ (Food Standards Australia New Zealand).

Food labels must tell the truth, be legible and contain the name or description of the food. Exceptions are very small packages, foods with no significant nutritional value (for example, herb, spice, tea, coffee), foods sold unpackaged (unless a nutrient claim is made) and foods made and packaged at the point of sale (for example, bread from the local bakery).

Food labels should contain the following information.

- List of ingredients listed by weight in descending order (that is, the first ingredient contributes the largest amount to the product and the last ingredient contributes the least).
- Nutrition information panel (NIP) presented in a standard format showing energy, protein, fat, carbohydrate and sodium per serving and per 100g (or 100mL if a liquid).
- Percentage labelling information – the product must show the percentage of the key or characterising ingredients or components of the food.
- The number or the name of any additives (monosodium glutamate may appear as MSG or 621, for example).
- If the product contains any major allergens, such as nuts (peanuts, cashews, almonds, walnuts etc.), shellfish, fish, eggs, sesame seeds, soybeans, wheat and gluten, they must be declared on the label. In addition, foods containing more than 10mg sulphite preservatives/kg must be labelled as containing sulphite, as this is the level that may trigger asthma attacks in some asthmatics. This information is often found close to the ingredient list.
- Date marking includes use-by date, best before and ‘baked on’ or ‘baked for’. Food must be eaten before the use-by date for health and safety reasons (for example, yoghurt). The exception to this is bread that can be labelled ‘baked on’ or ‘baked for’. The best before date is used on foods with a shelf life of less than two years. Food may still be edible after the best before date, but may have lost some quality (for example, canned foods).
- If the product needs to be stored in a specific way to maintain quality, storage requirements need to be indicated on the label, for example: keep frozen (ice cream), refrigerate below specific temperature (milk) or store in a dry, cool place (flour).
- Country of origin refers to the country the product was made or produced in.
- The name and business address of the supplier of the food. This assists with consumer queries such as suspected food poisoning or where a food has been recalled.
- Some labels may contain ‘nutrient content claims’ (health claims). These are explained later.

Activity: Food label ingredient lists
(SLIDE 31/Participant’s Workbook pp. 8-9)

Have participants turn to pages 8 and 9 of their workbook and complete the activity on how to read an ingredient list.

Can they recognise the different types of added sugars used in the full-fat strawberry yoghurt and the breakfast cereal? Manufacturers often use more than one sweetener so that sugar does not top the list of ingredients.
**Nutrition Information Panel**

A NIP must be listed on nearly all packaged foods. Exceptions are very small packages, foods with no significant nutritional value (for example, herb, spice, tea, coffee), foods sold unpackaged (unless a nutrient claim is made), and foods made and packaged at the point of sale.

These panels list the nutrients for the food per serving (the serving size is determined by the manufacturer) and per 100g. To compare two products, use the per 100g column. The ‘per serve’ column gives consumers an indication of what their nutrient intake would be if they ate the equivalent of a serve as described on the packet. Remember that the manufacturer’s serving size may not reflect your own serving size or the example serve listed in *The Australian Guide to Healthy Eating*.

It is compulsory to list the following nutrients. Energy is listed in kilojoules (kJ), protein (in grams), fat (in grams), and must show the total quantity as well as the amount contributed by saturated fats. Likewise for carbohydrates (in grams) – both the total amount and the amount contributed by sugar must appear. Sodium (in micrograms) is also compulsory.

**Nutrition claims**

If the product has a ‘nutrient content claim’ (for example: high in fibre, high in calcium, low in cholesterol), the manufacturer has to indicate the quantity of that nutrient in the NIP. Some examples of nutrition claims include:

**Fat**

- **Low-fat**: Less than 3g fat/100g food (or 1.5g/100g liquid).
- **Reduced-fat**: At least 25% less fat than the regular product.
- **Fat-free**: No more than 0.15g total fat/100g food.

**Sugar**

- **No added sugar**: No added sucrose, glucose, honey, malt, fruit juice etc.
- **Unsweetened**: No added artificial sweeteners, sucrose, glucose, honey, malt, fruit juice etc.
- **Diet**: At least 40% less kJ than the regular product – these products usually contain intense (artificial) sweeteners.

**Salt**

- **Low-salt/no added salt/salt free**: Less than 120mg sodium/100g (0.3%) or not more than 50% of the sodium content of the regular product.
- **Reduced-salt/sodium, salt/sodium free and no added salt/sodium**: At least 25% less salt/sodium than the regular product.

**Fibre**

- **High (in) fibre**: At least 3g or more fibre per serve.

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**Group discussion: Food label ingredients list**

**SLIDE 33/Participant’s Workbook p.9**

What claims do you look for on food labels when ordering for the school canteen? Some discussion points arising from this slide may include the following.

- Don’t rely on the claims alone; check the label.
- Reduced-fat does not necessarily mean low-fat (for example, low-fat cheddar cheese ~ 23% fat vs full-fat cheddar cheese ~ 34% fat); it just needs to be 25% less than the regular product to be labelled as reduced-fat.
- 94% fat-free yoghurt/milk is regular yoghurt/milk (~4% fat). Full-fat milk ~3.6% fat.
**Web resources**

*Australian Guide to Healthy Eating*
*The Australian Guide to Health Eating* is a food selection guide which visually represents the proportion of the five food groups recommended for consumption each day. It reflects the multicultural nature of the population relevant for all sectors of the food and nutrition industry.

*Children Nutrition Topics (Victorian Government Health Information)*
This website provides fact sheets and information about nutrition for infants, toddlers, preschoolers and children at school.

*2013 Australian Dietary Guidelines*
*The 2013 Australian Dietary Guidelines* are based on the best available scientific evidence and provide information for health professionals and the general population about healthy food choices. The use of the guidelines will encourage healthy lifestyles that will minimise the risk of the development of diet-related diseases within the Australian population.

*Dietitians Association of Australia (DAA) – Smart Eating For You: Nutrition A–Z*
A guide covering nutrition information presented in an A-Z format. All material available on this website has been written and regularly reviewed by Accredited Practising Dietitians.

*Food Standards Australia New Zealand Government Website*
The Food Matters section of this website contains information on food allergies, additives and other information in relation to standards set in Australia and New Zealand for food. The News Room link provides fact sheets, media releases, speeches and presentations.
http://www.foodstandards.gov.au

*Healthy Weight Guide (Australian Government)*
The Healthy Weight Guide is a comprehensive source of information which is available to the Australian public on how to achieve and maintain a healthy weight. The Healthy Weight Guide consists of an interactive website as well as printed materials for those who don’t have access to the internet, and provides: information about healthy weight, physical activity and healthy eating; tips and tools to assist with setting goals and planning healthy meals and physical activity; and a registered area where users can record and track their weight and progress.
www.healthyweight.health.gov.au

*Health Insite – Food and Nutrition*
An Australian Government Initiative website containing links to topics such as diet, family nutrition and key nutrients.

*Nutrient Reference Values for Australia and New Zealand*
The (Nutrient Reference Values) NRV’s are a set of recommendations for nutritional intake based on currently available scientific knowledge. On this page you will find information on a wide variety of foods and the nutrients they contain. There is also a calculator for determining the nutrient recommendations for specific ages and genders.
Topic 2: The NHSC Food Categorisation System

(SLIDES 34–76)
The NHSC food categorisation system is based on the 2013 Australian Dietary Guidelines
The AGTHE is consistent with the 2013 Australian Dietary Guidelines

Activity: AGTHE

(SLIDE 42/Participant’s Workbook p.12)
How many serves would the following be?
Refer participants to the AGTHE tables on page 12 of their workbook. Go through the first example (apricots) together. Have them use the table to estimate the number of serves of each food group in a typical school lunch. Ask them to complete total serves as well.

*Note: The serves of vegetables are added together in the total.*
The NHSC food categorisation system
Foods have been classified into three categories based on *The Australian Guide to Healthy Eating* and according to their nutritional value.

### ALWAYS ON THE MENU
The **GREEN** category*

### SELECT CAREFULLY
The **AMBER** category*

### NOT RECOMMENDED ON THE CANTEEN MENU
The **RED** category*

Each of the food categories is discussed in detail in the NHSC *Guidelines for healthy foods and drinks supplied in school canteens* (pages 4-8).

<table>
<thead>
<tr>
<th>GREEN</th>
<th>Always on the menu</th>
</tr>
</thead>
</table>
| Foods and drinks categorised as **GREEN** are the best choices for the school canteen menu as they contain a wide range of nutrients and are generally low in saturated fat and/or sugar and/or sodium (salt).
| These foods and drinks should be: |
| • available every day |
| • included as the main choices on the canteen menu |
| • presented in attractive and interesting ways |
| • promoted as tasty, good value choices. |

<table>
<thead>
<tr>
<th>AMBER</th>
<th>Select Carefully</th>
</tr>
</thead>
</table>
| Foods and drinks categorised as **AMBER** contain some valuable nutrients as well, but may also contain higher levels of saturated fat and/or sugar and/or sodium (salt). If eaten in large amounts these foods may contribute to excess energy (kilojoules) being consumed.
| These foods and drinks should be: |
| • sold in smaller serve sizes |
| • less prominent on the canteen menu |
| • moved towards the *GREEN* end of the spectrum at every opportunity.* |

<table>
<thead>
<tr>
<th>RED</th>
<th>Not recommended on the canteen menu</th>
</tr>
</thead>
</table>
| Foods and drinks categorised as **RED** are low in nutritional value and may contain excess energy (kilojoules) and/or saturated fat and/or sodium (salt) and/or sugar.
| These foods and drinks should: |
| • not be provided in healthy school canteens. |
Deciding if a food or drink is suitable for sale
Slowly walk participants through the decision tree on SLIDE 53.
Activity: Sample menu – sorting foods

(SLIDES 55–56/Participant’s Workbook p.13)

Refer participants to pages 6-8 of the NHSC Guidelines for healthy foods and drinks supplied in school canteens.

Participants will use the tables to determine if the items are categorised as GREEN, AMBER, RED or NOT SURE. NOT SURE items will be assessed later in the session.

<table>
<thead>
<tr>
<th>Item</th>
<th>Category (please tick one)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GREEN</td>
</tr>
<tr>
<td><strong>Drinks</strong></td>
<td></td>
</tr>
<tr>
<td>Full-fat plain milk (375mL)</td>
<td></td>
</tr>
<tr>
<td>Iced tea</td>
<td></td>
</tr>
<tr>
<td>Low-fat flavoured milk</td>
<td>✓</td>
</tr>
<tr>
<td>(375mL)</td>
<td>✓</td>
</tr>
<tr>
<td>Water</td>
<td></td>
</tr>
<tr>
<td>Lemonade</td>
<td></td>
</tr>
<tr>
<td>Orange juice (200mL)</td>
<td></td>
</tr>
<tr>
<td>Apple juice (600mL)</td>
<td></td>
</tr>
<tr>
<td><strong>Snacks</strong></td>
<td></td>
</tr>
<tr>
<td>Raisin toast</td>
<td>✓</td>
</tr>
<tr>
<td>Icy-pole (lemonade)</td>
<td></td>
</tr>
<tr>
<td>Pizza flavoured</td>
<td></td>
</tr>
<tr>
<td>snack biscuits</td>
<td></td>
</tr>
<tr>
<td>Doughnut</td>
<td></td>
</tr>
<tr>
<td>Cheese &amp; crackers</td>
<td></td>
</tr>
<tr>
<td>Fresh fruit salad</td>
<td></td>
</tr>
<tr>
<td>Muesli bar</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Main meals</strong></td>
<td></td>
</tr>
<tr>
<td>Hamburger</td>
<td></td>
</tr>
<tr>
<td>Sushi</td>
<td>✓</td>
</tr>
<tr>
<td>Two minute noodles</td>
<td></td>
</tr>
<tr>
<td>Ham sandwich</td>
<td></td>
</tr>
<tr>
<td>Pizza</td>
<td></td>
</tr>
<tr>
<td>Tuna sandwich with salad</td>
<td></td>
</tr>
<tr>
<td>Beef pie</td>
<td></td>
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</tbody>
</table>
Categorising menu items
(SLIDES 57–70)
Demonstrate how the NIP on food labels can be used to assess foods against the NHSC nutrient criteria using the three steps outlined on page 9 of the Guidelines for healthy foods and drinks supplied in school canteens.

Activity: Assessing menu items against the NHSC criteria
(SLIDE 66 and 71/Participant’s Workbook p.14)
The purpose of this activity is to give participants the opportunity to practise assessing commercial food items using the information found on labels and applying it against the NHSC Nutrient Criteria Tables. Do this for the AMBER and ‘Healthier Choices’ examples.
Have participants work in pairs or groups of three.
Provide each group with a set of food labels. Labels are available for printing from the CD provided with the training materials.
Have them compare the information on the NIP against the Nutrient Criteria Tables on page 10 and 11 of the Guidelines for healthy foods and drinks supplied in school canteens.

Group discussion: Moving items categorised as AMBER towards the ‘GREEN’ end of the spectrum
(SLIDE 72/Participant’s Workbook p.14)
Brainstorming as a large group, have participants provide some ideas as to how they might make each of the menu items ‘GREENer’.

Using the examples below, ‘GREEN’ these AMBER menu items.
(Workbook, p.14)

**Meals**
- Hamburger
- Lasagne
- Tomato soup and bread roll
- Pizza
- Sushi

**Snacks**
- Muffins/slices
- Reduced-fat ice cream
- Garlic bread
Group discussion: Sodium content

(SLIDE 73/Participant’s Workbook p.14)
How can you reduce the sodium content of dishes?

Have participants brainstorm ideas for reducing the amount of salt, or replacing salt, in their dishes. Use less salt in cooking by adding other flavours, such as fresh herbs, spice, lemon juice and garlic. Check food labels and choose those that specify low-salt, reduced-salt or no added salt wherever possible.

Many of the ingredients used to prepare Asian dishes, such as soy sauce, oyster sauce and fish sauce are high in salt. Check the sodium content on the labels, especially flavouring agents used in Asian cooking. Choose the lowest-salt varieties and use in small amounts.

Group discussion: School canteen menu

(SLIDES 75-76/Participant’s Workbook pp.15-16)
Menus need to change from term to term to keep customers interested and to take advantage of the changing seasons. Working in small groups, ask participants to use the example menu as a base and suggest substitutions for the menu items listed. Also include a discussion on how students can be included in decisions regarding changes to canteen menu items.

Ideas for including students in the decision making process and incorporating their feedback/comments may include the following.

• Survey children on substitution of menu items for the next term. For example, A & B are being replaced by Y & Z next term – ask students to vote for their favourite. The most popular item is included in next term’s menu. Of course, items will need to fit the NHSC guidelines. Example surveys are included in the Participant’s Workbook, Appendix 1.
• Taste tests – the canteen may provide samples of new items for students to taste.
• Students vote for their favourite item and this is included in the next term’s menu.
• ‘Specials menu’ to gauge popularity of proposed items.
• Suggestion box.
These types of approaches give students some ownership and promote inclusion in the decision-making process, increasing the likelihood that changes will be accepted.

It is important to survey staff as well, as they also buy food from the canteen and model behaviours to the students. Remind the canteen managers to conduct separate surveys for junior/upper primary as junior primary students may not have the capacity to make more sophisticated comments. Always keep statistics of what sells and what doesn’t.
Topic 3: Special Dietary and Cultural Needs

(SLIDE 77–85)
Planning a school canteen menu involves more than just meeting the NHSC nutrient criteria. You may also need to take into consideration the cultural and special dietary needs of your clients. This session primarily involves engaging participants in discussions regarding whether they need to, or how they might consider special dietary needs and cultural issues when planning menus.

Food allergy and food intolerance

(SLIDES 78–82)
The term allergy is often misused to describe everything from a headache through to tummy bloating, and you may have the impression that every second child you meet is allergic.

True food allergy is a serious life-threatening condition. Some people are allergic to the protein found in common foods. Their immune system mistakenly detects the protein as a ‘foreign’ substance and mounts an attack, very similar to when you get a cold. The runny nose, aches and pains, watery eyes etc. are due to your body trying to get rid of the ‘foreign’ bacteria. When your body has killed off enough bacteria, you start to feel better.

With food allergy, however, the immune system does not know when to stop and so the reaction keeps going and can be life threatening. This is called an anaphylactic reaction. The reaction usually occurs within 30 minutes of exposure to the food, either by eating or, in some people, by touching or coming into contact with the food containing the protein. Children at risk of anaphylaxis will probably have an epi-pen (a one-dose adrenaline injection) and an action plan detailing the procedure to take if exposure to the allergen occurs. The action plan is usually placed in prominent positions around the school. Strict avoidance of the protein is necessary. Further information on action plans can be obtained from the Australasian Society of Clinical Immunology and Allergy (ASCIA) website. Details are in the Guidelines for healthy foods and drinks supplied in school canteens on page 42.

Food intolerance, on the other hand, is sensitivity to the chemicals found in food. These chemicals can be naturally occurring or be added by manufacturers. The one you might be most familiar with is MSG (monosodium glutamate), also represented by the number 621 on food packaging labels. This chemical occurs naturally in certain foods such as aged cheese and mushrooms or it can be added during processing to enhance flavour in savoury snack foods, such as flavoured crisps and two-minute noodles. Unlike food allergy, the reaction may take several days to appear. Not all chemicals are a problem for sensitive people.

Small amounts may be tolerated without inducing symptoms. Only a small percentage of the population is sensitive to food chemicals.

Some schools choose to stock foods that do not contain artificial colours and flavours.

A table detailing the additives most likely to cause a problem in sensitive individuals has been included in the Guidelines for healthy foods and drinks supplied in school canteens on page 43.
**Group discussion: Role of the school canteen with regards to special dietary needs**

*(SLIDE 81/Participant’s Workbook p.17)*

What do you think the role of the school canteen is in regards to special dietary needs?

Many canteen managers feel pressure to accommodate all the special dietary needs of children in their school. This discussion is to clarify the role of the canteen manager regarding special dietary requirements. At the end of the discussion it should be made clear that it is not the role of the canteen manager, or the school canteen, to accommodate all special dietary needs beyond adhering to any relevant school policies. For example, where there is a ‘nut free’ policy in place, products containing nuts would not be available for sale. Some schools may decide to stock products, such as soy milk, if practical and there is sufficient demand.

**Preparing foods to satisfy specific cultural or religious needs**

*(SLIDES 83–85)*

During the 200 years of Western settlement in Australia, many nations have contributed to our ever-growing population. With each nationality comes a variety of traditions, cultural and religious influences. The Australian diet today is very different to that of our parents and grandparents and reflects many ethnic influences.

Knowing how to cater for a range of specific cultural religious requirements is important when catering for multicultural school populations.

**Group discussion: Acknowledging cultural differences**

*(SLIDE 83/Participant’s Workbook p.17)*

The purpose of this discussion is to acknowledge diverse cultural groups and cuisines within the school community.

How many different cultures are represented at your school?

Does your canteen menu cater for different cultures and cuisines?

- Halal meats, vegetarian options, ethnic dishes (for example, sushi, stir-fry, pastas, curry)

Why should you do this?

- Address the cultural needs of specific groups in the school community
- Expose other students to a variety of cuisines

Direct participants to the extended reading (websites) listed in the References section at the end of Topic 3 regarding food trends, general nutrition information and special diets (for example, vegetarian) when considering planning canteen menus.
Group discussion: Ethnic food days

(SLIDE 85/Participant’s Workbook p.17)

What foods could you cook on these days?

Note: Trainers will need to provide participants with a list of contacts (dietitians/nutritionists, medical specialists or other relevant people), who are able to assist participants to confirm and/or identify, where appropriate, the dietary and cultural requirements of different target groups.

Looking after the planet

(SLIDE 86)

This session finishes with a brief overview of some things that can be done to make the school canteen more eco-friendly.

School canteens can make their own contribution to tackling the problems of global warming and climate change.

• Wherever possible, buying local is best practice because the food will be fresher, the nutrition more intact and there are benefits in supporting the local community.
• Buying vegetables and fruit seasonally means you get the product before it has been stored for months, or shipped from far away, and at a lower price because the product is in abundance.
• Kitchen gardens are used successfully in some schools. Utilising produce from the garden can help to reduce food costs and it encourages the children to eat what they have grown.
• Frozen and canned vegetables and fruit are often a viable option. They are nutritious, easy to store, available year round and often cheaper than fresh.
Web resources

**Children Nutrition Topics (Victorian Government Health Information)**
This website provides fact sheets and information about nutrition for infants, toddlers, preschoolers and children at school.

**Dietitians Association of Australia (DAA) – Smart Eating For You: Nutrition A–Z**
This guide covers nutrition information presented in an A-Z format and includes information on vegetarian diets. All material available on this website has been written and regularly reviewed by Accredited Practising Dietitians.

**Food Standards Australia New Zealand Government Website**
The Food Matters section of this website contains information on food allergies, additives and other information in relation to standards set in Australia and New Zealand for food. The News Room link provides fact sheets, media releases, speeches and presentations.
http://www.foodstandards.gov.au

**Fresh for Kids**
This website provided by the Sydney Markets includes information on seasonal produce as well as fun things for kids to do relating to healthy eating.

**Go for 2&5**
This website promotes the benefits of eating fruit and vegetables and gives loads of tips and recipes on how to reach the recommended targets.

**National Training Information Services**
This Website provides information about the unit of competency SITHCCC0.35A *Develop menus to meet special dietary and cultural needs.*

**Stephanie Alexander Kitchen Garden Foundation**
This website provides inspiration and ideas for starting a kitchen garden in your school.

**The Australian Society of Clinical Immunology and Allergy**
This is the peak professional body of Clinical Immunologists and Allergists in Australia and New Zealand. This website gives up to date information on allergy and immune diseases, including asthma.

**State and Territory Canteen Associations**
These websites provide tips on how to successfully run a school canteen.

- **NSW School Canteen Association**

- **QLD Association of School Tuckshops**
  http://www.qast.org.au/

- **TAS School Canteen Association**
  http://www.tascanteenassn.org.au/

- **VIC School Canteen Association**
  http://www.vsca.org.au/

- **WA School Canteen Association**
Where to from here

(SLIDES 87–89)

Conclude the training workshop by summing up for participants what they have learned today. You may choose to revisit the earlier discussion on what a healthy canteen is and reiterate the requirements of canteen customers.

Explain the process to those participants interested in gaining a Statement of Attainment for the unit of competency *Develop menus to meet special dietary and cultural needs*, drawing particular attention to the extra resources in their Workbook:

- The Workplace Implementation Project
- Web links provided for extra reading, and
- The Nutrition Panel Calculator.

Provide participants with nutrition support contact details.
References


Pettigrew, S Donovan, RJ Jalleh, G Pescud, M & Cowie, S 2009, Addressing Childhood Obesity through School Canteens, Report to the WA Department of Education and Training, UWA Business School, the University of Western Australia, and the Centre for Behavioural Research in Cancer Control, Curtin University, Perth.


Appendix 1: Sample Evaluation Form for Training Session

National Healthy School Canteens Project Training Evaluation

Date and place ________________________________

Aim
To provide the opportunity to develop the skills and understanding necessary to use the National Healthy School Canteens (NHSC) food categorisation system.

Learning outcomes
- Design a canteen menu in line with the NHSC food categorisation system (including specific cultural or dietary needs).
- Assess individual manufactured food products against the nutritional criteria.

Topic 1: Nutrition basics

Topic 2: The NHSC food categorisation system

Topic 3: Special dietary and cultural needs

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The training was well presented</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The trainer understood the school canteen context</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There was sufficient time for questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The training was appropriate for my level of expertise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. To achieve the learning objectives, the training session was:
   Too short  About right  Too long

2. The mix of learner activity and trainer input was:
   Too much activity  About right  Too much input
3. What was most useful for you today?

4. What was least useful for you today?

5. List up to three things you have learned today

6. Rate your ability to design a canteen menu in line with the NHSC food categorisation system:
   - Very high
   - High
   - Moderate
   - Poor

7. Rate your ability to design a canteen menu in line with the NHSC food categorisation system that meets specific cultural or dietary needs:
   - Very high
   - High
   - Moderate
   - Poor

8. Rate your ability to assess individual manufactured food products against the NHSC nutrient criteria:
   - Very high
   - High
   - Moderate
   - Poor

9. Rate your understanding of how to implement the NHSC food categorisation system in your school:
   - Very high
   - High
   - Moderate
   - Poor

10. What further support or resources do you think you will need to implement the NHSC Guidelines for healthy foods and drinks supplied in school canteens?
    - Very high
    - High
    - Moderate
    - Poor

11. How likely is it that you will seek a Statement of Attainment from a Registered Training Organisation?
    - Very likely
    - Somewhat likely
    - Unlikely

Thank you! Please leave this form with your trainer.
Appendix 2: Assessor Guidelines for the National Healthy School Canteens Workplace Implementation Project

Objective of the Workplace Implementation Project
The objective of the Workplace Implementation Project (the Project) is for participants in the National Healthy School Canteens (NHSC) workshop to develop a report providing evidence that, following the workshop, they have planned and implemented menus and recipes that meet the Guidelines for healthy foods and drinks supplied in school canteens and demonstrate the competencies outlined in the Tourism, Hospitality and Events Training Package (SIT07) unit SITHCCC035A Develop menus to meet special dietary and cultural needs. The unit descriptor for SITHCCC035A is included at the end of this appendix.

Information provided to participants
During the NHSC workshop, all participants received the following:

- Guidelines for healthy foods and drinks supplied in school canteens
- Quick Reference flip chart
- Participant’s Workbook
- Poster (Healthy kids need healthy canteens!) x 3
- The Australian Guide to Healthy Eating poster, and
- National Healthy School Canteens Workplace Implementation Project.
The Assessment Process

To effectively assess the competency of the participant in the unit SITHCCC035A *Develop menus to meet special dietary needs*, the following process is recommended:

1. On receipt of the Project documentation, match and assess the evidence provided against the Elements, Performance Criteria and Required Skills and Knowledge and within the parameters of the Range Statement (see the Unit Descriptor included in this appendix). The Assessor Tool provides details of the Elements and Performance Criteria and a range of evidence that may be provided by participants.

2. Where the assessor believes that additional evidence is required, several additional methods may be used to obtain the evidence, including:
   - asking the participant specific questions
   - requesting confirmation from a third party that the evidence submitted was developed by the participant
   - requesting additional documentation such as actual survey results, emails, meeting agendas and minutes
   - workplace observation of menus, recipes and cooking methods.

3. If, following the assessment process outlined in 1 and 2 above, the assessor believes that additional evidence is still required from the participant, the assessor should provide the participant, in writing, with details of the additional evidence required. These details can be recorded in the Assessment Tool comments column. Please note that it is important for the assessor and participant to agree on a due date for the reassessment.

Assessor Qualifications

A requirement of the *Australian Quality Training Framework (AQTF 2007)* Standard 1.4 is that assessment is conducted by trainers and assessors who:

a. have the necessary assessment competencies as determined by the National Quality Council or its successors

b. have the relevant vocational competencies at least to the level being assessed, and

c. continue developing their vocational and assessment competencies to support continuous improvements.
# Assessor Tool

**Name of participant:** 

**Job position:** 

**School:** 

**Name of assessor:** 

**Date of assessment:** 

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
<th>Evidence</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify the dietary and cultural requirements of customers.</td>
<td>1.1 Identify the dietary and cultural requirements of different target groups through consideration of all appropriate factors</td>
<td>The results of a survey or other method used to gain information on the range and demand for special dietary or cultural needs. Needs identified could include: Special dietary needs: • Vegetarian • Vegan • Modified sodium or potassium • Low-fat or low-cholesterol • Lacto-ovo • High-fibre • Gluten-free • High or low-energy • Diabetic • Modified texture • High or low-protein • Fluids • Exclusions for allergies and food intolerance Cultural/religious needs: • Kosher • Halal • Vegetarian</td>
<td>NYC Competent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2 Identify how you took into consideration contemporary dietary trends when assessing dietary requirements of your customers</td>
<td>Proof of the process used to identify contemporary dietary trends and the consultation to ensure where the trends are compatible with the Guidelines for healthy foods and drinks supplied in school canteens.</td>
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<tr>
<td></td>
<td>1.3 Liaise with dieticians, medical specialists or other relevant people in order to identify and confirm requirements, where appropriate</td>
<td>Evidence can include: • List of people/organisations from whom advice and assistance was received • Records of meetings • Emails • Reports</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. Develop menus and meal plans to meet dietary and cultural requirements</td>
<td><strong>2.1 Select a variety of suitable foods, meals and menus for specific requirements taking account of Dietary Guidelines for Australians and menu planning principles</strong></td>
<td>Evidence of the resources and tools used to determine whether the menu and recipe ingredients meet the requirements: for example, evidence of the use of a recipe calculator to determine if a menu meets the requirements.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
| **2.2 Develop menus and meal plans that promote good health and reduce the incidence of diet-related health problems, in consultation with the relevant people and according to job role** | Evidence of the consultation process used to confirm that the menus and meal plans developed will contribute to promoting good health and reducing the incidence of diet-related health problems can include:  
- List of people/organisations from whom advice and assistance was received including dieticians, medical practitioners  
- Records of meetings  
- Emails  
- Reports |
<p>| <strong>2.3 Prepare cyclic menus when required and balance them in terms of nutritional requirements and variety</strong> | Evidence that cyclic menus have been developed and that they retain the required nutritional balance as well as providing variety. |
| <strong>2.4 Recommend food preparation and cooking methods to maximise nutritional value of food</strong> | Evidence of changes in food preparation and cooking methods and how the changes have improved the nutritional value of food available in the canteen. |
| <strong>2.5 Identify appropriate combinations of food to meet macro and micro nutrient requirements</strong> | Evidence that the method used to assess whether the menu and recipe combinations meet macro and micro nutrient requirements. |
| <strong>2.6 Take into consideration special needs including texture, composition and portion size</strong> | Evidence that the menu and recipes developed for the canteen also meet the required texture, composition and portion size for the profile of the canteen customers. |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>2.7 Incorporate sufficient choice of dishes into the menus</td>
<td>Evidence of a range of choices of dishes that meet the dietary and cultural requirements of the canteen customers and provide sufficient choice and variety.</td>
<td></td>
</tr>
<tr>
<td>2.8 Cost menus to comply with costing constraints</td>
<td>Evidence of the costing calculations for the menu that meets the costing requirements for the canteen. The evidence can include both the costing guidelines and actual costings of menu items.</td>
<td></td>
</tr>
<tr>
<td>2.9 Use correct terminology in menus and meal plans</td>
<td>The terminology used in the Workplace Implementation Project report (including the menu plans and nutrition guidelines) contains the correct terminology.</td>
<td></td>
</tr>
<tr>
<td>3. Evaluate meals and menus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Evaluate meals and menus to ensure customer satisfaction</td>
<td>Evidence of the tools used to measure customer satisfaction, the results of the evaluation and action plan to make changes where required. The evidence should also include the policy and procedure for gathering evidence including consideration of privacy requirements.</td>
<td></td>
</tr>
<tr>
<td>3.2 Adjust menus as required to ensure dietary needs and goals are met</td>
<td>Evidence of changes made to menus and recipes based on the findings of the evaluation. In addition, the participant should also provide evidence of the methods used to ensure that the established menu and recipe requirements in relation to nutritional balance, special dietary and cultural needs etc. are maintained following the changes.</td>
<td></td>
</tr>
</tbody>
</table>
Develop menus to meet special dietary and cultural needs

Unit descriptor
This unit describes the performance outcomes, skills and knowledge required to develop menus and meal plans for all Australians, including meeting specific dietary and cultural needs. The unit focuses on the knowledge and skills required to meet nutritional requirements in the preparation of meal plans, diets and menus. The menu may be developed with or without the direction of a dietician or medical specialist, depending on the job role. This unit does not cover preparation and cooking of food to meet dietary and cultural needs which is addressed in SITHCCC029A Prepare foods according to dietary and cultural needs.

Nor does it focus on general menu planning principles involving budgetary and marketing concerns, which are covered in SITHCCC040A Design menus to meet market needs. Evidence is required of knowledge and understanding of a range of different cultural, dietary and special requirements.

However, the focus of this range will vary according to the target markets of a particular workplace. Special dietary needs include therapeutic and contemporary regimes as well as customer requests. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Employability skills
The required outcomes described in this unit of competency contain applicable facets of employability skills. The Employability Skills Summary of the qualification in which this unit is packaged will assist in identifying employability skills requirements.

Prerequisite units
Nil

Application of the unit
This unit applies to those responsible for developing menus in all catering operations where food and related services are provided such as restaurants, educational institutions, health establishments, defence forces, cafeterias, kiosks, cafes, residential catering, in-flight and other transport catering, events catering and private catering. Those undertaking this role would be supervisors or managers and may be chefs or others such as catering managers.

Competency field
Commercial Cookery and Catering

Sector
Hospitality
# Elements and Performance Criteria

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where **bold italicised** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify the dietary and cultural requirements of customers.</td>
<td>1.1 Identify the <em>dietary</em> and <em>cultural requirements</em> of different <em>target groups</em> through consideration of all appropriate <em>factors</em>.</td>
</tr>
<tr>
<td></td>
<td>1.2 Take into consideration <em>contemporary dietary trends and regimes</em> in assessing dietary requirements.</td>
</tr>
<tr>
<td></td>
<td>1.3 Liaise with dieticians, medical specialists or other relevant people in order to identify and confirm requirements, where appropriate.</td>
</tr>
<tr>
<td>2. Develop menus and meal plans to meet dietary and cultural requirements.</td>
<td>2.1 Select a variety of suitable foods, meals and menus for specific requirements taking account of <em>Dietary Guidelines for Australians</em> and menu planning principles.</td>
</tr>
<tr>
<td></td>
<td>2.2 Develop <em>menus and meal plans</em> that promote good health and reduce the incidence of diet-related health problems, in consultation with relevant people and according to job role.</td>
</tr>
<tr>
<td></td>
<td>2.3 Prepare cyclic menus when required and balance them in terms of nutritional requirements and variety.</td>
</tr>
<tr>
<td></td>
<td>2.4 Recommend food preparation and cooking methods to maximise nutritional value of food.</td>
</tr>
<tr>
<td></td>
<td>2.5 Identify appropriate combinations of food to meet macro and micro nutrient requirements.</td>
</tr>
<tr>
<td></td>
<td>2.6 Take into consideration special needs, including texture, composition and portion size.</td>
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<tr>
<td></td>
<td>2.7 Incorporate sufficient choice of dishes into the menus.</td>
</tr>
<tr>
<td></td>
<td>2.8 Cost menus to comply with costing constraints.</td>
</tr>
<tr>
<td></td>
<td>2.9 Use correct terminology in menus and meal plans.</td>
</tr>
<tr>
<td>3. Evaluate meals and menus.</td>
<td>3.1 <strong>Evaluate</strong> meals and menus to ensure customer satisfaction.</td>
</tr>
<tr>
<td></td>
<td>3.2 Adjust menus as required to ensure dietary needs and goals are met.</td>
</tr>
</tbody>
</table>
Required Skills and Knowledge

This section describes the essential skills and knowledge and their level required for this unit. The following skills must be assessed as part of this unit:

- cookery techniques and recipe modification to suit special dietary requirements
- literacy skills to read and write menus and recipes
- communication skills to liaise with dieticians and relevant people, clarify requirements, provide information, and listen to and interpret information and non-verbal communication
- numeracy skills to calculate nutritional values of foods and menus and to calculate cost of menus.

The following knowledge must be assessed as part of this unit:

- basic principles and practices of nutrition, including:
  - nutrients and their food sources
  - influences on food choice
  - food labelling requirements and interpretation
  - food additives and preservatives
  - health implications of food choices
- 2013 Australian Dietary Guidelines
- Australian Guide to Healthy Eating
- dietary sensitivities, including food allergies and intolerances, diabetes and other medical conditions
- existence of drug–food interactions, and the health and legal consequences of failing to address special requirements
- commodity knowledge of ingredients suitable for meeting basic nutritional and special dietary needs
- effects of various cooking methods and food storage on nutrients.
Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. **Bold italicised** wording in the performance criteria is detailed below.

| Dietary requirements may include: | • vegetarian  
• vegan  
• modified sodium or potassium  
• low-fat or low-cholesterol  
• lacto-ovo  
• high-fibre  
• gluten-free  
• high or low-energy  
• diabetic  
• modified texture  
• high or low-protein  
• fluids  
• exclusions for allergies and food intolerance. |
|----------------------------------------|--------------------------------------------------|
| Cultural requirements may include the dietary requirements or sanctions and cultural needs of any ethnic, cultural or religious group, including: | • kosher  
• halal  
• vegetarian  
• Hindu. |
| Target groups refer to all sectors of the population and may include: | • infants  
• children  
• adolescents  
• athletes  
• the aged. |
| Factors to be considered when identifying the dietary and cultural needs of target groups may include: | • age requirements  
• lifestyle  
• food preferences  
• food restrictions or allergies  
• physical condition  
• nutritional requirements  
• those with varying nutritional and energy requirements due to physical condition  
• cultural or religious needs. |
| Contemporary dietary trends and regimes may include current trends and fashions such as: | • vegetarian  
• low-fat, low-carbohydrate or low-kilojoule  
• macrobiotic. |
| Menus and meal plans may be developed to address the requirements of individuals or larger target audiences, including: | • daily meal plans  
• daily or weekly menus  
• cyclic menus |
| Methods used to evaluate diets and meal plans, and analyse foods may include: | • computer programs  
• customer feedback questionnaires  
• interviews with customers and health support personnel  
• nutrition guides. |
Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the Assessment Guidelines for this Training Package.

<table>
<thead>
<tr>
<th>Critical aspects for assessment and evidence required to demonstrate competency</th>
<th>Evidence of the following is essential:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ability to prepare a variety of menus and meal plans to meet different dietary and cultural needs</td>
<td></td>
</tr>
<tr>
<td>• knowledge of commodities required to meet particular dietary and cultural needs</td>
<td></td>
</tr>
<tr>
<td>• knowledge of the consequences of failing to address special dietary requirements</td>
<td></td>
</tr>
<tr>
<td>• project or work activities that allow the candidate to develop menus to meet multiple and differing dietary and cultural needs.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Context of and specific resources for assessment</th>
<th>Assessment must ensure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• use of real customers with special dietary needs from different target markets.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Methods of assessment</th>
<th>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• evaluation of menus and meal plans prepared by candidate involving a variety of target markets and purposes</td>
<td></td>
</tr>
<tr>
<td>• case studies to assess ability to develop menus and meal plans for different target groups and circumstances</td>
<td></td>
</tr>
<tr>
<td>• written or oral questions to test knowledge of nutrition, cultural and dietary requirements</td>
<td></td>
</tr>
<tr>
<td>• review of portfolios of evidence and third-party workplace reports of on-the-job performance by the candidate.</td>
<td></td>
</tr>
</tbody>
</table>

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

• SITHCCC040A Design menus to meet market needs.
Acknowledgements

The *National Healthy School Canteens* Project is an initiative of the Australian Government and was developed by Flinders University, supported by Flinders Partners, a wholly owned subsidiary of Flinders University.

The Project Team would like to thank the *National Healthy School Canteens* Project Reference Group members, their education department colleagues, and the schools, canteen managers and students who participated in the development of the Project.

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