



School Canteen Guidelines

Northern Territory 2006



Northern Territory Government

A combined initiative of the
Department of Health and Community Services &
Department of Employment, Education and Training

The Northern Territory School Canteen Action Group first developed the *Northern Territory School Canteen Guidelines* in 1997.

The *Northern Territory School Canteen Guidelines* (1997) were developed to assist those working in school canteens to provide nutritious meals for school children. A companion booklet was produced for schools in remote areas and entitled *Tummy Rumbles: Guidelines for Remote Area Canteens* (1997).

The Nutrition and Physical Activity Program, Northern Territory Department of Health and Community Services (DHCS) revised the *Northern Territory School Canteen Guidelines* in 2005.

The following groups are acknowledged for their valuable contributions:

DHCS Nutritionists

Northern Territory Department of Employment, Education and Training (DEET) - Health Promoting Schools

DHCS Environmental Health Officers

DHCS Oral Health Services

Reproduction of this work in whole or in part for educational purposes within an education institution and on condition that it is not offered for sale, is permitted by the Nutrition and Physical Activity Program, DHCS.

For further information or copies please contact:

Project Officer

Nutrition and Physical Activity Program

Department of Health and Community Services

Ph: (08) 8985 8026

Health Curriculum Adviser

Health Promoting Schools NT

Department of Employment, Education and Training

Ph: (08) 8999 8752

Contents

Why have school canteen guidelines?	4
The role of the school canteen	4
What should children eat?	5
The Dietary Guidelines for Children and Adolescents in Australia	5
Australian Guide to Healthy Eating	6
Breads, cereals, rice, pasta and noodles	7
Vegetables, legumes	8
Fruit	9
Milk, yoghurt and cheese	10
Meat and meat alternatives (protein foods)	11
Drinks	12
Extra foods (those with limited nutritional value)	13
What about fats?	13
Meal menu suggestions	14
General menu suggestions	15
Hot foods	15
Sandwich fillings	15
Snacks	16
How to market healthy foods	17
Make them look good	17
Make sure children can see them	17
Promote them	17
Myths surrounding healthy food	18
Food safety	20
Food poisoning	20
Personal hygiene	20
Food hygiene	21
Cross contamination	21
Use-by dates	22
Temperature control	22
Storage temperature and time	23
Frozen food	23
Food in the refrigerator	23
Pest control	24
Building construction	24
Where to get more information	25
Nutrition Resources	26
Useful websites	27
How healthy is your school canteen?	28

Why have school canteen guidelines?

These guidelines have been designed to assist canteen managers, canteen committees and other interested school community members to plan and provide nutritious food that complies with current dietary advice. The guidelines also provide advice on food hygiene and safety.

As the number of overweight and obese school children continues to rise, increasing attention is being paid to what and where children eat (and exercise). While it is acknowledged that the canteen only contributes a small amount to children's overall daily nutrition, its 'symbolism is big'¹ and there is much to be gained from having a healthy canteen.

This explains why work is currently underway to develop a 'National Healthy School Canteen Framework'. Meanwhile the original *Northern Territory School Canteen Guidelines* (1997) have been revised and updated to incorporate the latest national recommendations on nutrition.

By implementing these guidelines, you will join a growing number of school canteens across Australia that are 'using ripples to create a wave of healthy eating'.¹

The role of the school canteen

The school canteen has the challenging role of providing a low cost nutritious catering service, while operating at a reasonable profit to ensure that this essential service is sustainable. The two are not incompatible, as demonstrated by the increasing number of canteens that implement healthy canteen guidelines and operate successfully.

Beyond these functions, the canteen can also play an important modelling or educative role, which can be further reinforced at all other points where food is supplied in the school (e.g. excursions, sports days, vending machines). In this way, the same message is sent consistently across the school community and the canteen acts as an extension of the class-room.

Accordingly, the type of foods and drinks sold in the canteen should not be in contradiction with nutrition education given in the classroom, or national efforts to improve nutrition in general. Likewise, it would be unethical to regard the school canteen as a means of raising funds for the school *if* this is detrimental to the nutritional quality of the foods or drinks sold in the canteen.

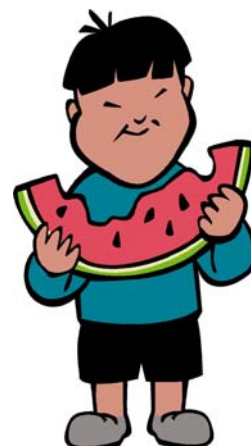
The following pages aim to assist the school canteen play its important role in promoting healthy eating among children.

¹ Bell A, Swinburn BA. School canteens: using ripples to create a wave of healthy eating. MJA 2005; 183 (July 2005):5-6

What should children eat?

There are two Australian guides that provide information about what makes up a healthy diet. These guides are:

- The Dietary Guidelines for Children and Adolescents in Australia²
- The Australian Guide to Healthy Eating³



The Dietary Guidelines for Children and Adolescents in Australia

These guidelines highlight the groups of foods and lifestyle patterns that promote good nutrition and health.

The Dietary Guidelines for Children and Adolescents in Australia

Encourage and support breastfeeding.

Children and adolescents need sufficient nutritious foods to grow and develop normally.

- Growth should be checked regularly for young children.
- Physical activity is important for all children and adolescents.

Enjoy a wide variety of nutritious foods.

Children and adolescents should be encouraged to:

- eat plenty of vegetables, legumes and fruits
- eat plenty of cereals (including breads, rice, pasta and noodles), preferably wholegrain
- include lean meat, fish, poultry and/or alternatives
- include milks, yoghurts, cheese and/or alternatives. Reduced-fat milks are not suitable for young children under 2 years, because of their high energy needs, but reduced-fat varieties should be encouraged for older children and adolescents
- choose water as a drink. Alcohol is not recommended for children.

And care should be taken to:

- limit saturated fat and moderate total fat intake. Low-fat diets are not suitable for infants.
- choose foods low in salt
- consume only moderate amounts of sugars and foods containing added sugars.

Care for your child's food: prepare and store it safely.

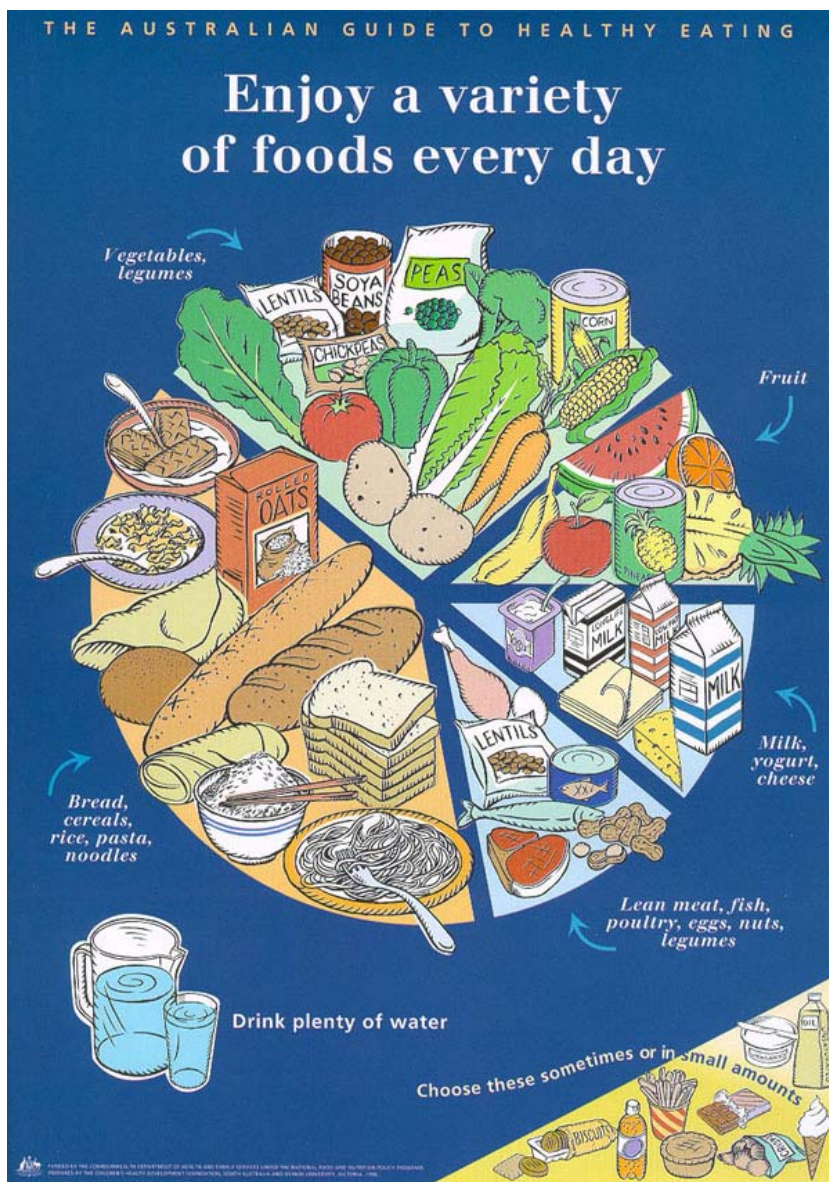
² National Health and Medical Research Council Food for Health: Dietary Guidelines for Children and Adolescents in Australia, 2003

³ Commonwealth Department of Health and Family Services. The Australian Guide to Healthy Eating. Commonwealth of Australia 1998

Australian Guide to Healthy Eating

The *Australian Guide to Healthy Eating* shows how to put the *Dietary Guidelines for Children and Adolescents in Australia* into practice. It tells us how much and what kinds of food we need each day to get enough of the nutrients essential for good health and well-being.

Each segment of the circle is a visual representation of the recommended proportion of the food groups we should be having for a balanced diet. For instance, about one third of our food should come from the bread, cereals, rice, pasta and noodles group.



Variety within each group should also be encouraged.

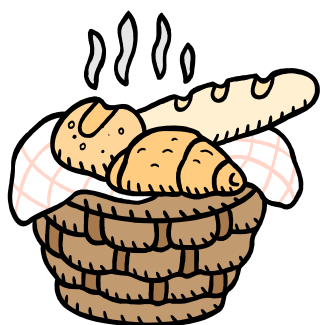
In the bottom right corner of the guide is a category of foods referred to as 'sometimes' or 'extra' foods'.

These foods are not essential to provide us with our daily nutrient requirements and they tend to be high in fat, and/or salt and/or sugars.

Canteens should avoid selling 'sometimes' or 'extra' food.

Examples of these foods include chips, pies (high fat ones), pasties, lollies, and biscuits.

The following pages take a closer look at each of the six categories of food in this guide, and give practical recommendations and tips on what to include and what to avoid in a school canteen. These sections have been designed to help you and your canteen make it easy for children to make a healthy choice.



Breads, cereals, rice, pasta and noodles

Foods in this group come from grains like wheat, oats, rice, rye, and corn. They should be included in all light or main meals provided by the school canteen.

Nutrients provided by foods in this group include carbohydrate for energy, iron for strong blood, fibre to prevent constipation and help lower blood cholesterol levels, and vitamins. The wholegrain or wholemeal varieties give more fibre, vitamins and minerals and should be used as much as possible.

In your canteen

Try

- 👍 Breads: wholemeal, multigrain, high fibre, wholegrain, rye. Vary regularly the types of bread available: rolls, pita, mountain bread, wraps, foccacia, lavash, Lebanese, bagels, raisin bread, fruit bread, fruit buns.
- 👍 Pikelets (plain or fruit), scones (plain or fruit), crumpets, low-fat fruit muffins, English muffins, finger buns (no icing, thinly spread with margarine).
- 👍 Biscuits: Crisp breads, wheat biscuits, water crackers.
- 👍 Rice: boiled, savoury, stir-fried (served with plenty of vegetables), rice salad, rice cakes, rice dishes (1 cup per serve), risotto.
- 👍 Pasta: dishes (1 cup per serve), pasta salads, lasagne, with bolognaise sauce (optional: add beans and vegetables), canned spaghetti.
- 👍 Noodles: dishes (1 cup per serve), stir-fry.

Avoid

- 👎 Cereal products listing hydrogenated fats, partially hydrogenated fats or artificial sweeteners among the ingredients.
- 👎 High sugar/high fat spreads (such as honey, jam, chocolate and hazelnut spread).
- 👎 Muesli or health bars that are high in fat.
- 👎 Confectionery.
- 👎 Chocolate and carob coated bars.
- 👎 Cream and chocolate biscuits, high fat cracker biscuits.
- 👎 Sweet snacks: Danishes, doughnuts, jellies, cakes, slices.
- 👎 Fried noodles.

Vegetables, legumes

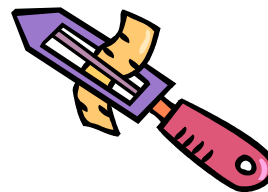
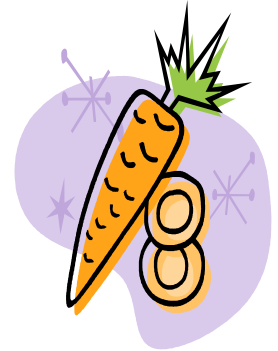


Vegetables come from many different parts of plants, including the leaves, roots, tubers, flowers, stems, seeds and shoots. Legumes include baked beans, kidney beans and split peas.

Foods in this group are a good source of vitamins (which help the body fight infections), carbohydrates (which supply energy), fibre (that help prevent constipation and help lower blood cholesterol levels) and iron for strong blood.

In your canteen

- 👍 Include vegetables and/or legumes in all light or main meals provided by the school canteen.
- 👍 Use a variety of vegetables including cruciferous (such as broccoli), dark green leafy, orange and red, and legumes such as peas, beans and lentils. Fresh, canned, dried and frozen vegetables and legumes are all suitable.
- 👎 Do not use vegetable products with hydrogenated fats or partially hydrogenated fats in the ingredients list.



Try

Baked potatoes (cooked in skins), vegetable burgers (low fat/low salt patties), vegetable soups (homemade preferred or low salt commercially produced - pumpkin, corn, tomato, lentils or split peas), hot corn on the cob, potato salad, 4 Bean mix.

Avoid

- 👎 Deep fried food of any description, including chips.
- 👎 Packets crisps/chips.

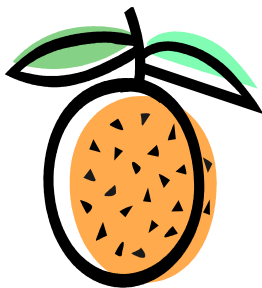
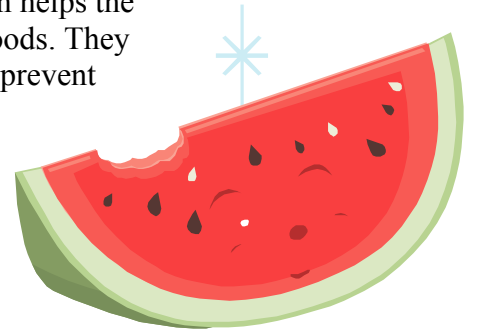


Fruit

Fruit forms from the flower and contains the seeds of the plant. Fruit is sweet because of the natural sugars it contains.

Fruit juices belong to this group, but have much lower fibre content than fresh fruit. Dried fruit contain a concentrated form of sugar. If eaten frequently or in large amounts they can contribute to tooth decay.

Fruits are a good source of vitamins, including vitamin C—which helps the body fight infections, keep skin healthy and absorb iron from foods. They are also a good source of carbohydrate for energy, fibre to help prevent constipation and folate to keep blood strong.



In your canteen

- 👍 Ensure that fruit is available every day for meals and snacks.
- 👍 Use a variety of fruits. Fresh, canned, dried, stewed and frozen fruit are all suitable.

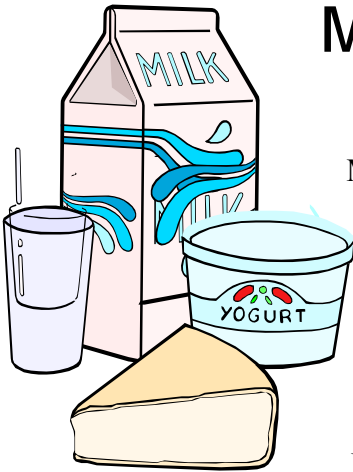
- 👎 Do not use fruit products with added sugars in the ingredients list.
- 👎 Do not use fruit products containing artificial sweeteners.

Try

- 👍 Fresh fruit kebabs.
- 👍 Fresh fruit slices, served with yoghurt.



Milk, yoghurt and cheese



Milk, yoghurt and cheese are excellent sources of calcium, which is important for strong bones and teeth.

These foods also contain: protein, for body growth and repair; carbohydrate, for energy; as well as some vitamins and minerals.

Reduced fat varieties are recommended for children over the age of two years, as they contain less fat and cholesterol.

In your canteen

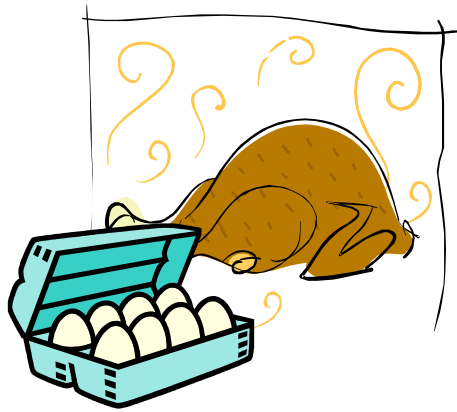
- 👍 Ensure that dairy products are available every day and include them in some of the light or main meals provided by the school canteen.
- 👍 Use reduced fat dairy products.
- 👍 Make sure that yoghurts and dairy desserts contain real fruit or puree, not fruit flavours.



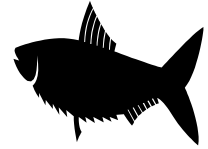
Try

- 👍 Different types of milk: plain, flavoured, calcium enriched.
- 👍 Soy milk, calcium enriched.
- 👍 Yoghurt: fresh, frozen, plain, fruit.
- 👍 Cheese: reduced fat sticks, cubes, slices or triangles, cottage, ricotta.
- 👍 Custard.





Meat and meat alternatives (protein foods)



There is a wide variety of foods in this group. It contains all kinds of protein foods, such as beef, lamb, veal, pork, kangaroo, poultry (chicken, turkey), fish and other seafood, eggs, nuts and nut pastes (such as peanut butter), legumes (baked beans, peas, beans) and some seeds such as sunflower and sesame seeds.

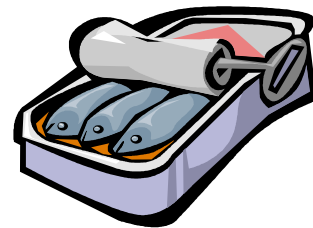
The foods in this group are a good source of: protein, for body growth and repair; iron, for strong blood; and zinc, for healthy skin and growth. All visible fat should be removed before cooking, including chicken skin.



In your canteen

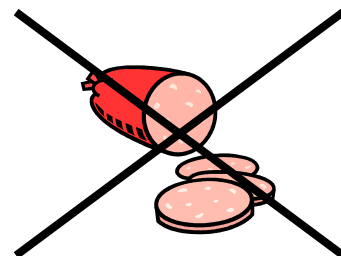
Try

- 👍 Lean meat: turkey, chicken, lamb, beef etc.
- 👍 Fresh/frozen fish: steamed or grilled.
- 👍 Canned fish/tuna: oil free, reduced fat, in spring water or brine.
- 👍 Meat alternatives: boiled eggs, spread made from legumes (e.g. hummus), peanut butter, baked beans, 4 Bean mix, unsalted nuts.



Avoid

- 👎 Fatty meats: cabana, salami, metwurst, luncheon meat.
- 👎 Meat pies, sausage rolls, etc. with full fat pastry.



Drinks

Water should be encouraged as the primary source of fluid and the best choice when thirsty. The body needs water every day; it is vital to every organ. Water helps carry nutrients around the body, assists the kidneys in removing unwanted chemicals and helps keep the body cool with sweating.



Drinking water is especially important when it is very hot or when being physically active.

Sports drinks are not appropriate for school canteens. Sports drinks usually contain 6-8% sugar and are only suitable for children who are undertaking regular, vigorous exercise or for competitive child athletes.

Tea and coffee are not the best choice as they contain caffeine, which tends to act to eliminate water from the body.

In your canteen

👍 Provide water, unless readily available elsewhere in the school.

Alternatives to water include:

- 👍 Juice: 100% fruit juice, no added sugar and limited to 250ml per serve.
- 👍 Milk: reduced fat plain or flavoured, calcium enriched, soy milks, hot chocolate, Milo, fruit smoothies, drinking yoghurt (use reduced fat varieties where possible), limited to 300ml serve for primary school and 600ml for secondary school.

Avoid

- 👎 Soft drinks, cordials, or drinks containing caffeine or guaranine
- 👎 Sports drinks, tea, iced tea and coffee.



Extra foods (those with limited nutritional value)

Some foods do not fit into the five food groups, as they are not essential to provide the nutrients the body needs. Foods in this group usually contain extra fat, sugar and salt and are referred to as 'extra foods'. They include biscuits, cakes, soft drinks and high-fat take-away foods, such as pies, chicken wings and hot chips.



The *Australian Guide to Healthy Eating* (1998) recommends to eat these foods sometimes, in small amounts, or not at all. As children have ample opportunities to eat these foods outside school, 'extra foods' should not be available through the school canteen.

What about fats?

Fats –including oils–are also part of the 'extra foods' and should be used sparingly. It is important to avoid saturated fats as they can increase the risk of heart disease. Saturated fats are found in butter and some vegetable oils that are commonly used in processed food. Monounsaturated fats and polyunsaturated fats are preferable and can be found in oils such as olive, peanut, canola and sunflower oil.



In your canteen

- 👎 Preferably, do not include 'extra foods' in your menu. If extra foods are available, use a modified version (e.g. reduced fat pies/biscuits) and restrict their sale to once a week.
- 👎 Do not add sugar or salt to prepared dishes.
- 👍 Use only a small amount of oil or margarine in food preparation.
- 👍 Spread margarine thinly on bread.
- 👍 Choose oils, dressings and spreads containing polyunsaturated or monounsaturated fats.
- 👎 Do not use products that list saturated fats, hydrogenated or partially hydrogenated fats towards the top of the ingredients list.





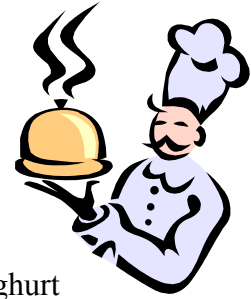
Meal menu suggestions

If you provide whole meals, the following table gives examples of simple lunches that have something from each of the five food groups.

Beef and vegetable stew with rice Milk drink Fresh Fruit	Wholemeal bread with ham and salad Fresh fruit Yoghurt
Vegetable soup Wholemeal bread with peanut butter Milo and fresh fruit	Macaroni cheese and tuna Carrot and celery sticks Fruit juice
Toasted sandwiches with corn kernels, cheese and tuna Fruche Fresh fruit	Baked beans in a mug with melted cheese Ryvita biscuits with a scrape of margarine Fresh fruit
Boiled egg Grated cheese and carrot sandwich Fruit salad	Mini pizzas, topped with lean ham, vegetable and cheese Canned fruit and milk drink



General menu suggestions



Hot foods

Burritos/Tacos– use lean meat, kidney beans, serve with salad and yoghurt

Baked potatoes – cooked in skins, split and filled with one or more of the sandwich fillings: e.g. grated reduced fat cheese and yoghurt, grated reduced fat cheese and diced tomato, cottage or ricotta cheese and crushed pineapple, plain yoghurt and savoury mince, diced tomato and mushrooms



Burgers – use low fat/low salt patties (meat, chicken, fish, lentil, vegetables) served with plenty of salad

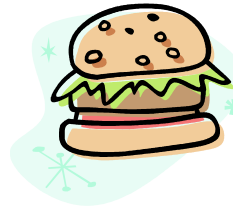
Pizza – either bread or commercial base with low fat/low salt toppings

Toasts – bread, muffins, crumpets, raisin bread, French toast

Souvlaki/kebabs – using lean meat, chicken or fish and vegetables

Pasta with reduced fat/salt toppings

Omelettes, vegetable frittatas



Sandwich fillings

Lean meat: e.g. roast meats (remove visible fat), lean chicken (no skin)

Fish: tuna, salmon, sardines

Creamed corn/corn kernels

Egg: hard boiled, mashed, sliced, curried

Salad e.g. lettuce, carrot, tomato, sprouts, cucumber, beetroot, corn

Hummus

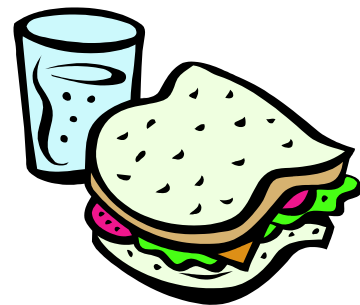
Baked beans

Cheese (reduced fat)

Vegemite/yeast spreads (use sparingly)

Cheese sticks wrapped in bread with vegemite

Peanut butter/paste (reduced salt)

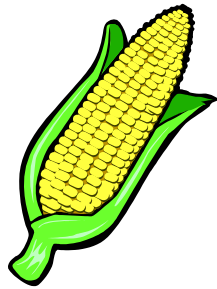


Try some of these combinations

Cheese, grated carrot, lettuce and sultanas
Tuna and salad
Peanut butter and salad
Chicken (skin removed), lettuce and mayonnaise
Ham, cheese and pineapple
Bananas, sultanas and coconut
Grated vegetables and grated reduced fat cheese

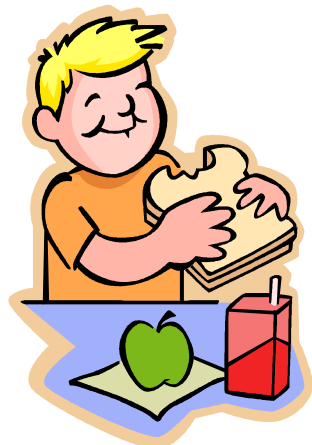
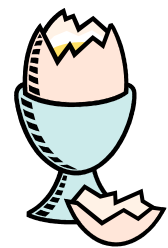
Banana, peanut butter and raisins
Lean hamburger patties, tomato and cheese
Curried egg and lettuce
Ham, cheese and sweet corn
Sardines and tomato
Banana, pineapple and coconut
Egg and vegetables
Corn kernels
Tomato and skinless chicken

Snacks



Frozen yoghurt
Boiled eggs
Sultana packs
Popcorn (plain)
Corn on the cob
Fruit and nut energy packs (mix together various nuts and dried fruits and serve in small plastic/paper bag)
Frozen ice-cups – fruit juice, canned fruit
Breakfast cereals (low fat, salt, sugar)
Fruit buns (without icing)

Cheese and biscuit packs
Frozen bananas on sticks (or rolled in orange juice and coconut)
Dried fruit packs
Nuts
Crunchy peanut dogs – celery sticks and peanut butter in a slice of bread
Celery boats and cheese or peanut butter
Bread sticks
Fruit or cheese pikelets



How to market healthy foods

Make them look good

- 👍 Have a bowl full of fresh fruit at the front of the counter where children are sure to see it.
- 👍 Wrap sandwiches in clear plastic wrap to sell at the counter.



Make sure children can see them

- 👍 Display healthy foods at children's eye level.
- 👍 Have a step/stool in front of the counter so that the smallest children can also see what is for sale.



Promote them

- 👍 When introducing a new item, let the students and the school community know by placing an ad in the school newsletter
- 👍 Ask the children to design posters of the new foods and display them around the school. Publish the best one in the newsletter.
- 👍 Offer free samples for the first couple of weeks or start selling the item at reduced price.
- 👍 Have 'Special Days' like 'Tuesday Taco Day'.
- 👍 Have a big blackboard or a sign outside the canteen that lists new foods or the daily specials.
- 👍 Create fun names for food and drinks that appeal, for example:
 - Monster Munchies
 - Barunga Burgers
 - Fruit Wobbles
 - Triple Decker sandwiches.
- 👍 Don't be afraid to try new items.
- 👍 Vary your menu as much as you can. Children are like adults, they like variety.



Myths surrounding healthy food

Myth	Health bars and roll-ups are healthy snack foods for children.
Fact	While health bars do contain small amounts of nutritious ingredients such as oats and dried fruit, they often contain large amounts of sugars and/or fat in the form of raw sugar, glucose, honey and carob or a combination. The sugar in roll-ups and muesli bars sticks to children's teeth and can contribute to tooth decay. Muesli bars and roll-ups are in the 'sometimes foods' category and should only be eaten occasionally.
Myth	Party pies are a good meal idea for children.
Fact	Food laws classify many small varieties of pies as party pies because they don't have enough meat in them to call them meat pies. Party pies have more fat and less iron in them than ordinary pies. Ordinary pies are considered 'sometimes foods' and therefore their sale should be limited. Preferably, use the reduced fat variety and limit sales to once a week.
Myth	Children don't like fruit.
Fact	Fruit is very popular amongst children if it is promoted well. Some children really like fruit when it is cut into pieces rather than served whole. There are many ways fruit can be used to make delicious and healthy snacks. Everybody prefers fruit that is cold and fresh.
Myth	Canned food is not healthy food.
Fact	Canned foods can be good alternatives to fresh foods. Fruits and vegetables are put into cans when they are very fresh. The canning process preserves most of the vitamins and all of the protein, minerals, fibre and carbohydrate in the food. If fresh fruits and vegetables are old and wilted they can actually have less vitamins than their canned alternatives. Canned legumes like baked beans and four-bean mix are particularly healthy foods. Choose reduced salt varieties where possible.
Myth	Flavoured milk should be avoided because it is high in sugar.
Fact	Flavoured milk is a nutritious drink for children. It contains all the nutrients of plain milk, with some extra energy provided from sugar. It has about the same amount of sugar as unsweetened orange juice. Even so, plain milk is the best choice for children. Serving sizes should be limited to 300ml for primary school aged children and 600ml for secondary students.
Myth	Children need extra salt in hot weather and during exercise.
Fact	Plain water is what the body really needs before, during and after exercise and in hot weather. Children need to drink more water at these times. Most Australians get more salt from their diet than their body needs, even if they don't add it to food during cooking or at the table. Salt occurs naturally in a wide variety of foods and is added to many processed foods.

Myth	Flavoured mineral water is better than soft drinks.
Fact	Most flavoured mineral waters contain small amounts of fruit juice. However like soft drinks, they contain around nine teaspoons of sugar per can. Water is the best drink for children.
Myth	Children who are active should drink sports drinks.
Fact	Sports drinks are designed for the use of athletes competing or training in endurance sports. They are designed to prevent dehydration during these times and provide some energy. The volume that sports drinks are sold in means they provide the same amount of sugar as soft drink and 2-3 times more sodium (salt). For school children, water is the best drink.
Myth	Most nutrients are taken out of white bread during the processing.
Fact	White bread is a nutritious food that provides B vitamins, iron, some protein and dietary fibre. While wholemeal bread is higher in these nutrients and therefore preferable, white bread is still better than no bread at all. White bread sandwiches, rolls, etc are better choices than high-fat, low-fibre alternatives such as pies and pasties
Myth	Refined sugars are the best source of energy because the body absorbs them quickly.
Fact	Sugar provides energy but not the essential nutrients for the body to use the energy. Complex carbohydrates such as breads, cereals, fruits and vegetable are preferable to sugar. These foods provide a slow, steady supply of energy, as well as the nutrients essential for the body to use that energy.
Myth	Adolescent girls concerned about their weight should avoid red meat to cut down fat.
Fact	Lean red meat is one of the best sources of iron, zinc and protein. A diet that excludes red meat may not provide enough iron, especially for adolescent girls. Trim away all visible fat before cooking, cook without fats and oils and eat small serves.
Myth	Carob chocolate is better than regular chocolate.
Fact	Carob chocolate is just as rich in fat and sugar as regular chocolate. Carob chocolate has no nutritional advantage over other chocolate. It is, however, free from caffeine and theobromine, the stimulants in cocoa powder.
Myth	Processed foods cause food intolerances/allergies in children.
Fact	Some people have a reaction to food chemicals. These chemicals can occur naturally in foods or are added to foods during food processing. Reactions can vary from person to person, with the variety of symptoms being recurrent hives, headaches, mouth ulcers, stomach pains, bowel irritation, flu-like aches and pains, feeling generally run down, restless and irritable. These symptoms can occur immediately or anywhere up to a week later, depending on the individual. Children with suspected food intolerances should have a medical diagnosis to identify which food chemical(s) cause(s) the intolerance. This may prevent the unnecessary avoidance of a whole food group (e.g. dairy products), which could cause malnutrition.
Myth	Processed food causes hyperactivity in children.
Fact	Hyperactivity in children appears to occur in between 3% and 20% of the population. There is the possibility that some of these children may have a reaction to chemicals in food, either natural or processed. Artificial colouring agents added to soft drinks and confectionary may be triggers for hyperactivity.

Food safety

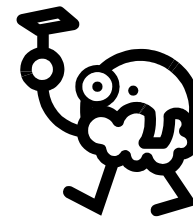
Food poisoning

Most people at some time have eaten foods and later on become sick. This is called food poisoning and symptoms may include one or more of the following:

- vomiting
- feeling weak
- stomach pains
- fever or chills
- diarrhoea

Food poisoning is caused by germs that have multiplied on the food. Food can become contaminated through:

- people, working with food
- dirty equipment and benches
- other food that is already contaminated
- animals and insects near food.



In serious cases, especially with small children, **food poisoning can kill**. This is why it is **very important** to look after the food properly. Below are some ways to stop the spread of germs and bacteria in the school canteen.

Personal hygiene

If you have a cut on your hand, cover the cut with a waterproof dressing before touching food. If you are sick you should get medical advice before working, as some diseases can be spread to other people. Keep long hair tied back or covered so that it does not fall in the food.

In your canteen

Always wash your hands:

- before touching food
- after using the toilet
- after smoking
- after blowing your nose or sneezing into your hand
- after touching your hair
- after touching animals
- after handling money.



If possible, have a different person handling the money and the cash register. Wear a clean apron when preparing food. Smoking in the kitchen is illegal and dangerous.

Food hygiene

- Pack foods carefully so as not to damage the packaging.
- Do not use swollen cans or damaged food packets as the food inside may be “off”.
- Use and store food so that the older products get used first.
- Cover foods stored in the refrigerator with plastic wrap or foil to prevent food spilling over.
- Do not overfill front-loading refrigeration display cabinets so the cold air can’t get to all foods.
- Check the food looks and smells good before using it – *if in doubt, throw it out!*
- Wash fruit and vegetables carefully before using them, to remove dirt and germs.

Cross contamination

- Cooked foods and raw foods should be stored separately to make sure that cross contamination does not occur. Cross contamination occurs when germs, which are naturally found on raw food, move onto cooked food. It usually happens when:
 - raw food – especially blood and juice from meats – touches cooked food
 - preparation areas are not cleaned after preparing raw food and before cooked foods are put in the same area
 - the same cloths are used for cleaning up after both raw foods and cooked foods.
- Careful cleaning helps to prevent germs from spreading by removing food pieces that could have germs on them. Some cleaning products can kill germs. Tips to stop cross contamination:
 - Keep all foods covered when stored – plastic wrap or airtight plastic containers.
 - Use separate areas and separate chopping boards for raw foods and cooked foods. If you can’t have separate areas, make sure that the bench is washed with hot soapy water after preparing raw food (e.g. meat, vegetables) and before preparing cooked food.
 - Use separate cleaning cloths for raw and cooked food preparation areas.
 - Before cooking, wipe down benches and other equipment with hot soapy water and rinse.
 - Wear a clean apron or coverall.
 - After cooking, wash the benches and other equipment in hot soapy water – allow to air dry.
 - Store saucepans and containers upside down.
 - Place rubbish in the rubbish bin and empty the bin daily.
 - Clean the floors and walls regularly.
 - Have a regular cleaning roster/routine.



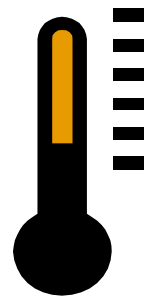
Use-by dates

The use-by date tells you the time for which the food retains its quality. The manufacturers recommend that food be eaten by this date for it to be at its best quality. The food should be stored according to what is written on the package, otherwise food may go 'off' before the use-by date.

Temperature control

Temperature control of food is a very important way of preventing food poisoning. Cold temperatures stop germs from breeding and spoiling food. Hot temperatures (cooking) will kill the germs.

- Defrost chicken and meat in the refrigerator for a full day before cooking it.
- Store fresh meat, fish, chicken and cooked rice in the refrigerator – below 5°C – until needed, a maximum of three to four days.
- Keep all cooked foods **hot** – above 60°C – until served.
- If cooked food is going to be stored for later, let it cool for no longer than 2 hours before storing it in the refrigerator. Keep it covered at all times. The temperature needs to be dropped rapidly to stop germs multiplying.
- Freeze food in small amounts rather than in one large container to ensure the food freezes and defrosts thoroughly.
- Do not refreeze food that has already been defrosted.
- Make sure cool rooms are working properly to keep food **cold** – below 5°C – and check the rubber seals on the doors are in good condition.
- Make sure freezers are working properly to keep food **frozen** – below minus 15°C.



Storage temperature and time

Frozen food

Frozen Food	Storage temperature	Maximum storage time
Mince and sausage	-18°C to -10°C	1 month
Soup, stews, seafood, bread, pastry, ice-cream, sponge cake	-18°C to -10°C	3 months
Meat, chicken, fruit and vegetables	-18°C to -10°C	6 months
Fruit cake	-18°C to -10°C	12 months

Food in the refrigerator

Refrigerated food	Storage temperature	Maximum storage time
Cooked meats	0 to 5°C	1 day
Seafood	0 to 3°C	3 days
Shell fish	0 to 3°C	2 days
Meat	0 to 3°C	3-5 days
Minced meat and offal	0 to 3°C	2-3 days
Chicken	0 to 3°C	3 days
Fruit juices	0 to 7°C	7-14 days
Milk	1 to 7°C	5-7 days
Cream	1 to 7°C	5 days
Cheese	0 to 7°C	1-3 months
Butter	0 to 7°C	8 weeks
Margarine	2 to 7°C	6 months

Pest control



Pests can carry food poisoning germs on their bodies and contaminate food and preparation surfaces such as benches and equipment. Pests can also damage stock and that means a loss of money.

The best ways to control pests are to:

- keep the place clean so pests are not attracted inside
- have the canteen in good condition, with flyscreens on all openings to the building
- use insecticides if required (read conditions of use).



Building construction

- A well-designed building can make cleaning easier, improve hygiene, reduce costs, and stop pests from getting into the food and preparation area.
- The building and any equipment should be in good condition and maintained well.
- The ceiling, walls and floor should have a smooth, waterproof, washable surface and be a light colour.
- All surfaces and equipment should be kept clean.
- All windows, doors and openings should have fly screens or have some way to prevent flies contaminating the food and surfaces.
- Be aware of holes in the walls or under cupboards as they provide ideal hiding places for cockroaches.
- A hand basin with hot and cold water should be available and easy to get to, for washing hands.
- Equipment such as cookers, shelves, refrigerators and freezers should be raised on legs so it is easy to clean under them.

Where to get more information

Nutrition

For more food and nutrition ideas you could arrange to have your local Nutritionist come to your school canteen.

Darwin	8922 8221
Katherine District	8973 8946
East Arnhem District	8987 0395
Barkly District	8962 4269
Alice Springs	8951 6711

Environmental Health

For further information on food safety, hygiene and kitchen construction contact your local Environmental Health Officer or Worker.

Darwin Urban	8922 7377
Darwin Remote	8922 7152
Katherine	8973 8767 8973 8411
Nhulunbuy	8987 0440 8987 0441
Tennant Creek	8962 4302
Alice Springs	8951 6920

Health Promoting Schools NT

For curriculum ideas or classroom activities please contact Health Promoting Schools NT on 8999 8752.

Federation of Canteens in Schools (FOCiS) Secretariat

FOCiS provides advice on products registered as suitable for sale in school canteens, registration of products, and acts as a national voice on issues related to school canteens. Information is disseminated through the magazine *Canteen News*.

sandy@focis.com.au

or 07 4171 0753

Nutrition Resources

Management Sense, Food Sense: The Essential Guide for Food Service in your School.

Includes information and templates covering all areas of managing school canteens. Includes information on nutrition policy.

To order log onto: <http://www.tased.edu.au/tasonline/tsca/msfsform.htm>

Food Hopscotch Game (NT)

A nutrition education tool that helps children understand the importance of healthy eating and how to incorporate a variety of nutritious foods into their daily diet. Linked to the NT Curriculum Framework (NTCF). The teacher booklet is available and the game is available on loan from your local Nutritionist.

NT Hunting For Health Challenge

The Hunting for Health Challenge (HFHC) has been developed in the NT. It contains Early Childhood, Middle and Upper Primary nutrition lessons. The HFHC also requires regular physical activity to complete the challenge.

Available from Health Promoting Schools – NT Ph: (08) 8999 4355

Eat Smart for Heart - Heart Foundation -Primary School Nutrition Program

A folder containing 12 Units of Work with blackline masters. Has nutritional information for teachers, takes a Health Promoting Schools approach and has ideas for healthy choice canteens.

Available from the Heart Foundation – NT Branch

Ph: (08) 8981 1966

Fax: (08) 8941 0344

Healthy Jarjums Make Healthy Food Choices

This is written especially for Indigenous children. It comes with a big book as well as Lesson plans for Units of Work for primary school students.

Available from Community Health Services Centre QLD.

Ph: (07) 3275 5333

Fax: (07) 3372 7323

Useful websites

WA School Canteens Association <http://www.waschoolcanteens.org.au/>

Nutrition Australia. <http://www.nutritionaustralia.org/>

Go for 2 and 5, the National Fruit and Vegetable Campaign. Includes ideas and recipes to increase fruit and vegetable consumption.

<http://www.gofor2and5.com.au>

ActiveAte (Queensland Department of Education and the Arts) a school-based program designed to increase knowledge and awareness of healthy eating and physical activity among students of primary school age and the wider school community. It also promotes the adoption of healthy eating practices and physically active lifestyles by children.

<http://education.qld.gov.au/schools/healthy/active-ate/index.html>

Crunch & Sip™ (Western Australia Government) is a set break to eat fruit (or salad vegetables) and drink water in the classroom. Students 're-fuel' with fruit or vegetables during the morning or afternoon - assisting physical and mental performance and concentration in the classroom. school. To set up the program go to <http://www.crunchandsip.com.au>

NOSH: Nutrition in Out of School Hours (South Australia)

<http://www.chdf.org.au/>

'Fresh Tastes' NSW Department of Education and Training Healthy School Canteen Strategy https://www.det.nsw.edu.au/policies/student_serv/student_health/canteen_gu/PD20020058.shtml

How healthy is your school canteen?

Place a tick in the box if your answer is yes.

Nutrition	
The canteen offers a variety of breads and cereals (e.g. wholemeal, multigrain and white) every day.	<input type="checkbox"/>
Breads are available in different types (e.g. rolls, slices, pita).	<input type="checkbox"/>
The canteen does not sell high fat/high sugar biscuits or crackers.	<input type="checkbox"/>
The canteen does not sell lollies or chocolates.	<input type="checkbox"/>
The canteen menu always contains products with vegetables (fresh, tinned or frozen).	<input type="checkbox"/>
A range of fruits is available daily (fresh or tinned).	<input type="checkbox"/>
Several types of dairy products are available daily (e.g. plain milk, flavoured milk, yoghurt, cheese).	<input type="checkbox"/>
A majority of dairy products are reduced-fat.	<input type="checkbox"/>
The fruit in dairy products available in the canteen are real fruit or puree, not fruit flavours.	<input type="checkbox"/>
The canteen offers a range of meats (including lean red meat), chicken and fish.	<input type="checkbox"/>
Alternatives to meat (e.g. eggs, beans) are also available everyday.	<input type="checkbox"/>
The canteen does not sell 'fatty' meats (e.g. cabana, salami).	<input type="checkbox"/>
The canteen does not sell soft drinks.	<input type="checkbox"/>
The canteen does not sell caffeine or guaranine drinks.	<input type="checkbox"/>
All fruit juices available in the canteen are 100% fruit juice, with no added sugar, and limited to 250ml per serve.	<input type="checkbox"/>
Milk drinks are reduced fat and limited to 300ml for primary schools and 600ml for secondary schools.	<input type="checkbox"/>
The canteen does not sell foods from the 'extra foods' category. If it does, they are reduced fat and their sale is restricted to one day only per week.	<input type="checkbox"/>
Salt or sugar are not added to prepared dishes.	<input type="checkbox"/>
The canteen does not use products that list saturated fats or hydrogenated fats towards the top of the ingredients' list.	<input type="checkbox"/>
The canteen does not sell fried foods, including chips.	<input type="checkbox"/>

Management	
The School/School Council has a school canteen committee.	<input type="checkbox"/>
The School/School Council has a school canteen policy.	<input type="checkbox"/>
The canteen committee seeks input from parents and the student body.	<input type="checkbox"/>
The committee meets with teachers to discuss ways of complementing school programs.	<input type="checkbox"/>
There is good two-way communication between the canteen committee and the School/School Council.	<input type="checkbox"/>
Canteen staff has regular access to professional development.	<input type="checkbox"/>
The school canteen is a member of a canteen association.	<input type="checkbox"/>

Promotion	
Food products displayed at the canteen look good and are attractive.	<input type="checkbox"/>
Healthier products have the best position in all displays.	<input type="checkbox"/>
The canteen uses colourful posters and display boards to promote its products.	<input type="checkbox"/>
New products are advertised through the newsletter.	<input type="checkbox"/>
New products are promoted through free tastings.	<input type="checkbox"/>
The canteen has weekly specials, with fun and imaginative names.	<input type="checkbox"/>
The canteen menu varies and new items are introduced on a regular basis.	<input type="checkbox"/>

Add up your ticks – a score of 25 or more indicates you are well on the way to a Healthy Canteen. The more ticks the better. Perhaps you could use these ideas as a guide to making changes. For assistance contact your local Nutritionist.

NOTES