



EAT FOR HEALTH

Australian

Dietary Guidelines

SUMMARY



Australian Government

National Health and Medical Research Council

Department of Health and Ageing

www.eatforhealth.gov.au



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2013

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<ul style="list-style-type: none"> • Plenty of vegetables of different types and colours, and legumes/beans • Fruit • Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties, such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley • Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans • Milk, yoghurt, cheese and/or their alternatives, mostly reduced fat <p>And drink plenty of water.</p>	
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INTRODUCTION

The *Australian Dietary Guidelines* (the *Guidelines*) and the *Australian Guide to Healthy Eating* provide up-to-date advice about the amounts and kinds of foods that we need to eat for health and wellbeing. The recommendations are based on scientific evidence, developed after looking at good quality research.

By following the dietary patterns recommended in the *Guidelines and the Australian Guide to Healthy Eating*, we will get enough of the nutrients essential for good health and also help reduce our risk of chronic health problems such as heart disease, type 2 diabetes, some cancers and obesity. We may also feel better, look better, enjoy life more and live longer!

Our dietary patterns are made up of foods and drinks, not simply nutrients – it's the types and amounts of the foods and drinks that we consume regularly that really matter for our health.

However, there are many different ways to include foods to produce dietary patterns that suit different cultural, economic, social and culinary preferences, that deliver health benefits.

Many Australians enjoy flexible dietary patterns that include different ways of healthy eating. But most of us need to choose foods and drinks more wisely to help protect our health.

The *Australian Dietary Guidelines* make this easier (see page 5) by helping us choose wisely from the wide range of foods and drinks now available in Australia.

The *Australian Guide to Healthy Eating* (see page 4) summarises this information pictorially.

Careful dietary choices must be made so we can all enjoy good health and wellbeing. Too many of us are overweight, have high blood pressure or are facing chronic diseases such as heart disease, type 2 diabetes, some cancers and obesity.



What influences our food choices?

The world in which we live greatly influences the food choices that we make.

Australia is a developed nation and most of us have access to a wide variety of affordable, nutritious foods. The health and wellbeing of all Australians would improve if we chose foods and drinks according to the *Australian Dietary Guidelines* and the *Australian Guide to Healthy Eating*.

But where we live and how we live can also influence what we eat. It can be difficult for people to choose healthy foods, as often the cheapest foods that fill us up may not be the best choices for health.

Australians living in rural and remote areas may also have difficulty accessing nutritious foods, especially perishable items including vegetables and fruit. Food security may be a challenge for some groups, particularly Aboriginal and Torres Strait Islanders.

The foods that are most readily available in our community also tend to be the discretionary choices that are high in saturated fat, added sugars and salt and alcohol.

See the next page for foods and drinks we need to have more of and those we need to have less of.



Photo courtesy of the Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA)

Most Australians need more:

- ▶ Vegetables and fruit, particularly green, orange and red vegetables, such as broccoli, carrots, capsicum and sweet potatoes, and leafy vegetables like spinach, and legumes/beans like lentils.
- ▶ Grain (cereal) foods, particularly wholegrain cereals like wholemeal breads, wholegrain/high fibre breakfast cereals, oats, wholegrain rice and pasta.
- ▶ Reduced fat milk, yoghurt and cheese varieties (reduced fat milks are not suitable for children under the age of 2 years as a main milk drink).
- ▶ Lean meats and poultry, fish, eggs, nuts and seeds and legumes/beans (except many Australian men would benefit from eating less red meat).
- ▶ Water instead of soft drinks, cordials, energy drinks, sports drinks and sweetened fruit juices and/or alcoholic drinks.



Most Australians need to eat less:

- ▶ Meat pies, sausage rolls and fried hot chips
- ▶ Potato crisps, savoury snacks, biscuits and crackers
- ▶ Processed meats like salami, bacon and sausages
- ▶ Cakes, muffins, sweet biscuits and muesli bars
- ▶ Confectionary (lollies) and chocolate
- ▶ Ice-cream and desserts
- ▶ Cream and butter
- ▶ Jam and honey
- ▶ Soft drinks, cordial, energy drinks and sports drinks
- ▶ Wine, beer and spirits



AUSTRALIAN GUIDE TO HEALTHY EATING



Australian Government
National Health and Medical Research Council
Department of Health and Ageing

www.eatforhealth.gov.au

Australian Guide to Healthy Eating

Enjoy a wide variety of nutritious foods from these five food groups every day.

Drink plenty of water.

Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties



Vegetables and legumes/beans



Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans



Milk, yoghurt, cheese and/or alternatives, mostly reduced fat



Fruit



Use small amounts



Only sometimes and in small amounts



AUSTRALIAN DIETARY GUIDELINES

GUIDELINE 1

To achieve and maintain a healthy weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs.

- Children and adolescents should eat sufficient nutritious foods to grow and develop normally. They should be physically active every day and their growth should be checked regularly.
- Older people should eat nutritious foods and keep physically active to help maintain muscle strength and a healthy weight.

GUIDELINE 2

Enjoy a wide variety of nutritious foods from these five food groups every day:

- Plenty of vegetables of different types and colours, and legumes/beans
- Fruit
- Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties, such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley
- Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans
- Milk, yoghurt, cheese and/or their alternatives, mostly reduced fat

And drink plenty of water.

GUIDELINE 3

Limit intake of foods containing saturated fat, added salt, added sugars and alcohol.

- Limit intake of foods high in saturated fat such as many biscuits, cakes, pastries, pies, processed meats, commercial burgers, pizza, fried foods, potato chips, crisps and other savoury snacks.
 - Replace high fat foods which contain predominately saturated fats such as butter, cream, cooking margarine, coconut and palm oil with foods which contain predominately polyunsaturated and monounsaturated fats such as oils, spreads, nut butters/pastes and avocado.
 - Low fat diets are not suitable for children under the age of 2 years.
- Limit intake of foods and drinks containing added salt
 - Read labels to choose lower sodium options among similar foods.
 - Do not add salt to foods in cooking or at the table.
- Limit intake of foods and drinks containing added sugars such as confectionary, sugar-sweetened soft drinks and cordials, fruit drinks, vitamin waters, energy and sports drinks.
- If you choose to drink alcohol, limit intake. For women who are pregnant, planning a pregnancy or breastfeeding, not drinking alcohol is the safest option.

GUIDELINE 4

Encourage, support and promote breastfeeding.

GUIDELINE 5

Care for your food; prepare and store it safely.

QUIZ: ARE YOU EATING FOR HEALTH?

Take this quick quiz for adults to find out the answer – be honest! Give yourself one point for each box you tick if you:

- Eat at least 5 serves of vegetables every day. A serve is ½ cup cooked vegetables (hot chips don't count!) or 1 cup of salad.
- Eat at least 2 serves of fruit every day. A serve is 1 medium piece or 2 small pieces of fresh fruit, or one cup of chopped or canned fruit (no added sugar).
- Have at least 2 serves of reduced fat milk, yoghurt, cheese or alternatives every day (for example, 1 slice of reduced fat cheese, a small tub of reduced fat yoghurt (preferably no added sugar), 1 cup of milk or 1 cup of soy milk with added calcium).
- Eat mostly wholegrain cereals (such as high fibre breakfast cereal and wholemeal bread).
- Eat at least a small serve of lean meat or chicken (fat and/or skin cut off) or fish, or eggs or some nuts or legumes (for example, lentils, chickpeas, beans such as kidney beans or baked beans) every day.
- Drink plenty of water every day and limit drinks with added sugars, such as soft drinks, cordial, energy drinks and sports drinks.
- Limit takeaway foods such as pizzas, commercial burgers, hot chips or other deep fried foods to once a week or less.
- Limit store-bought cakes, muffins, pastries, pies and biscuits to once a week or less.
- Limit salty foods like processed meats (for example, salami and bacon), crisps and salty snacks to once a week or less, and avoid adding salt during cooking or at the table.
- Drink no more than 2 standard drinks containing alcohol on any one day.

How did you rate?

8–10 points Congratulations, you're already a pretty healthy eater!

6–8 points Keep going, you're nearly there!

4–6 points There's plenty of room for improvement.

Less than 4 It's time for a serious overhaul.

Use the information in this booklet for some great ideas.

Poor eating habits are sometimes hard to break. For adults, it's not too late to make changes if poor eating habits have crept up, but it's important to keep changes realistic using the practical information in this booklet should help.

For more information go to:

www.eatforhealth.gov.au



GUIDELINE 1: TO ACHIEVE AND MAINTAIN A HEALTHY WEIGHT, BE PHYSICALLY ACTIVE AND CHOOSE AMOUNTS OF NUTRITIOUS FOOD AND DRINKS TO MEET YOUR ENERGY NEEDS

- ▶ **Children and adolescents should eat sufficient nutritious foods to grow and develop normally. They should be physically active every day and their growth should be checked regularly.**
- ▶ **Older people should eat nutritious foods and keep physically active to help maintain muscle strength and a healthy weight.**

Many Australian adults and around a quarter of our children are now overweight or obese. Being overweight greatly increases the risk of high blood pressure, muscle, bone and respiratory disorders and chronic disease including type 2 diabetes, heart disease, stroke and some cancers, and reduces life expectancy. Being underweight also carries health risks.

Overweight people, especially children and adolescents, can also face social discrimination, low self-esteem, poor body image and depression. Children who are overweight tend to become overweight adults, especially if their parents are overweight too.

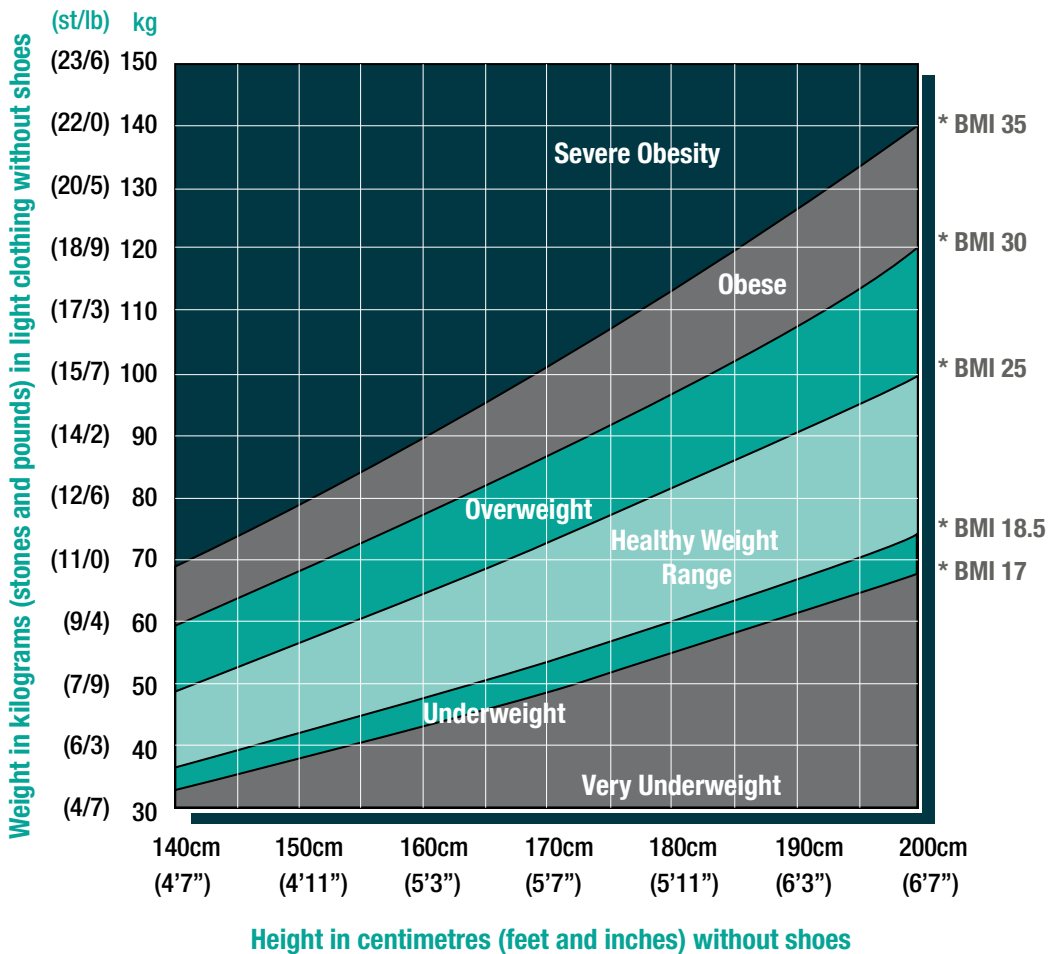
Look at the box to see whether you are a healthy weight.

▶ **What is my healthy weight?**

For adults, assessing your Body Mass Index (BMI) is a quick way to check weight status. The following chart can be used by most Australians as a rough guide to assess weight status:

1. Find your weight on the left and your height at the bottom of the chart.
2. From your height and weight, trace along the lines until they meet.
3. The point where the lines meet will tell you what BMI range you are in.

AIM FOR A HEALTHY WEIGHT: BMI CHART FOR ADULTS



$$* \text{ Body Mass Index (BMI) } = \frac{\text{Weight (kg)}}{\text{Height}^2 \text{ (metres)}}$$

Another way for adults to measure their weight-related health risk is with a tape measure. Measure halfway between your lowest rib and the top of your hip bone, roughly in line with your belly button.

Your waist measurement	Your weight-related health risk
Men less than 94cm Women less than 80cm	Your weight-related health risk is low.
Men between 94–102cm Women between 80–88cm	Your weight-related health risk is increased, especially if your BMI is more than 25 too.
Men more than 102cm Women more than 88cm	Your weight-related health risk is high.



The good news is that most weight-related illness is preventable, or at least partly reversible, by eating suitable amounts of nutritious foods, avoiding foods and drinks high in saturated fat, added sugars and alcohol, and being physically active. Adopting healthy habits can really help.

If you are overweight, it can be hard to lose weight and then to keep the weight off. Weight loss diets rarely work in the long term. In particular, weight loss diets that restrict the recommended intake of foods from any of the Five Food Groups can be dangerous. Recent evidence suggests it's the total energy (kilojoule) intake that counts. Even just small excess energy intake on a regular basis can explain weight gain.

The best approach for weight loss is to adopt a nutritious eating pattern and include enough physical activity each day whereby the total energy (kilojoule) needs for the day are slightly less than you actually need. For more information on 'what is a kilojoule' and 'kilojoule balance' go to www.eatforhealth.gov.au.

It's best to avoid gaining excess weight in the first place – particularly during childhood. But it can be hard to choose nutritious foods and drinks and be physically active, especially when foods and drinks high in saturated fat, added sugars and salt and alcohol are readily available and affordable, and the environment in which we live promotes over-consumption and sedentary lifestyles.

Aim for a healthy lifestyle – make positive choices and take control of your health. Look at all your areas of wellbeing and don't just focus on your weight. Feel good about yourself for making small changes – these can lead to big improvements.

For more information on achieving and maintaining a healthy weight go to:

www.eatforhealth.gov.au
www.healthyweight.health.gov.au

Tips for a healthy weight

- ▶ **Enjoy a healthy breakfast.**
- ▶ **Eat slowly and savour every mouthful.**
- ▶ **Listen to your body. Stop when, or even before, you feel full.**
- ▶ **Don't shop when you're hungry – and use a list.**
- ▶ **Plan healthy, quick and easy meals for busy days.**
- ▶ **Make meal times special occasions for the whole family. And turn off the TV!**
- ▶ **When eating out, make healthy choices. For example, choose grilled or steamed foods and avoid creamy sauces.**
- ▶ **Choose water instead of soft drink, cordial, fruit drinks, vitamin waters, energy drinks, sports drinks or alcoholic drinks.**
- ▶ **When hungry, fill up with fruit and vegetables.**
- ▶ **Don't spend a long time sitting down. Turn off the computer!**
- ▶ **Be physically active every day in as many ways as you can. Go for a walk, play active games, go for a ride, start a vegetable garden. Get the kids involved too.**
- ▶ **Find a friend or family member to help support you to eat healthily and be active.**

For more hints and tips go to:

www.eatforhealth.gov.au
www.healthyweight.health.gov.au

To achieve and maintain a healthy weight, it helps to check your weight regularly – at least every month; then adjust your food choices and physical activity levels depending on the results.

Adults need to do at least 30 minutes of moderate intensity physical activity on most, preferably all, days of the week. But to lose weight most of us will need to do more, particularly if we don't cut back on our food and drink intake. Older people should eat nutritious foods and keep physically active to help maintain muscle strength and a healthy weight for their age.

Children and adolescents should be physically active every day. For children over 5 years of age, the recommendation is for at least 60 minutes of moderate to vigorous activity every day. Children and adolescents should eat sufficient nutritious foods to grow and develop normally. Children's growth should be checked regularly using a growth reference chart.

Speak to your health professional to find out more, or talk to your doctor if you are worried.



► What do different levels of physical activity mean?

Sedentary activities mainly involve sitting or lying down, using little energy.

Light activities include standing and moving around in the home, workplace or community.

Moderate activities require some effort but you can still have a conversation. For example, walking briskly, gentle swimming or social tennis.

Vigorous activities make you huff and puff, so talking is difficult. Vigorous activities include jogging, aerobics and sports like football and netball.

For more information go to

www.eatforhealth.gov.au

www.healthyweight.health.gov.au

Photo courtesy of the Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA)

GUIDELINE 2: ENJOY A WIDE VARIETY OF NUTRITIOUS FOODS FROM THESE FIVE GROUPS EVERY DAY

- ▶ Plenty of vegetables, of different types and colours, and legumes/beans
- ▶ Fruit
- ▶ Grain (cereal) foods, mostly wholegrain, and/or high cereal fibre varieties such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley
- ▶ Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans
- ▶ Milk, yoghurt, cheese and/or their alternatives, mostly reduced fat

And drink plenty of water.

The key to eating well is to enjoy a variety of nutritious foods from each of the Five Food Groups. These Five Food Groups make up the central 'plate' (or main circle) on the *Australian Guide to Healthy Eating* on page 4.

Foods are grouped by their type and their contribution of nutrients to Australian diets. Within each group, healthy choices are those that are lowest in saturated fats, added sugars and salt.

Choosing a variety of nutritious foods, both from the five different groups and within each group, over the week and seasonally increases the likelihood of obtaining sufficient intake of all nutrients. Eating a variety of nutritious foods can protect our bodies from chronic disease and may also increase quality of life and longevity.



Tips to add variety

- ▶ Choose a variety of colours of fresh vegetables and fruits – green, orange, red, yellow, purple and white.
- ▶ Buy fresh produce in season – for better value, availability and quality.
- ▶ Plan ahead and stock up on the basics:
 - wholegrain breakfast cereal, wholegrain pasta, and brown rice and barley
 - reduced fat milk, yoghurt and cheese
 - lentils and beans like kidney beans and chickpeas
 - eggs, lean meats and poultry, fish
 - frozen or canned foods without added saturated fat, added sugar or added salt.
- ▶ Include some meat-free meals each week – include eggs, legumes such as beans and tofu, and nuts and seeds.
- ▶ Use wholegrain cereals like wholemeal bread and brown rice and pasta more often than white varieties.
- ▶ Older people who have trouble with their teeth, may prefer softer textured or cooked vegetables and fruit, finely milled wholemeal bread or other grain (cereal) foods, and dishes like soups, casseroles or stews.
- ▶ Try new foods. Have you tried polenta, couscous or quinoa?
- ▶ Eat at home more often. Try new recipes and invite some friends – enjoy good food together!
- ▶ When the food budget is tight, whole, unprocessed foods in season can be very economical.
- ▶ Using canned foods low in salt and sugar, or frozen vegetables are nutritious too.

For more ideas on
how to add variety to your diet go to:

www.eatforhealth.gov.au



Tuck into vegetables and fruit

Vegetables, legumes/beans and fruit provide vitamins, minerals, dietary fibre and many hundreds of phytonutrients (nutrients naturally present in plants). Most vegetables, legumes/beans and fruit are low in energy (kilojoules) relative to many other foods, and may help 'fill us up' to avoid excessive weight gain too.

Dietary patterns high in vegetables, legumes/beans and fruit can help protect us against chronic diseases including heart disease, stroke and some types of cancers. They may also prevent excessive weight gain.

The scientific evidence of the health benefits of eating vegetables and fruit has been reported for decades and continues to strengthen. Different vegetables can help protect the body in different ways, so it's important to choose a variety of colours, particularly:

- green (such as broccoli, spinach)
- orange (such as carrots, pumpkin, sweet potatoes)
- yellow and red (such as capsicum, tomatoes).

It is also important to include different types of vegetables, for example from the leaves and roots of plants, and legumes such as dried peas, beans, lentils and chickpeas.

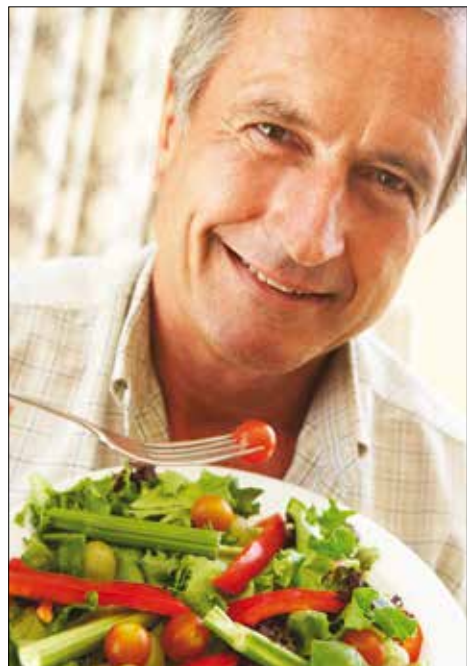
Fresh, frozen, canned or dried varieties of vegetables and fruit are all suitable foods. Check the ingredients list and choose varieties of canned vegetables without added salt and canned fruit in natural juice, not syrup.

Vegetables and fruit to limit

Fruit juices provides energy (kilojoules) but most lack dietary fibre. They are acidic and frequent consumption may contribute to an increased risk of dental erosion. Dried fruit can also stick to the teeth and increase the risk of tooth decay. For these reasons, fruit juice and dried fruit should be consumed only occasionally and in small amounts. Fruit juice should not be given to infants less than 12 months of age.

The intake of some salted, dried, fermented or pickled vegetables has been associated with an increased risk of some cancers, so intake of these foods should be limited.

Also limit intake of fried vegetables such as potato and vegetable chips and crisps, which add extra kilojoules and salt. Chips and crisps are included in 'discretionary choices' (see pages 27 and 34).



How much should we eat from the vegetable group?

Most Australians eat only about half the recommended quantity of vegetables. Try to choose different types and colours of vegetables to make sure you have enough of all necessary nutrients.

The minimum recommended intake of vegetables for younger children ranges from 2½ serves a day for 2–3 year olds to 4½ serves a day in 4–8 year olds. This increases to 5–5½ serves a day for older children and adolescents, 5–6 serves a day for adults including pregnant women and more than 7 serves a day for breastfeeding women.

For more information go to:

www.eatforhealth.gov.au

Minimum recommended number of serves of vegetables per day

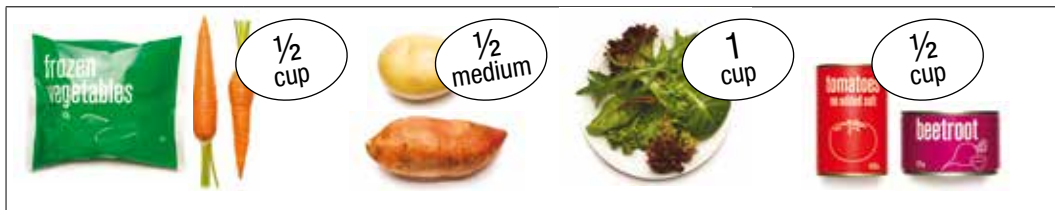
	Serves per day		
	19-50 years	51-70 years	70+ years
Men	6	5½	5
Women	5	5	5
Pregnant women	5	-	-
Breastfeeding women	7½	-	-

	Serves per day				
	2-3 years	4-8 years	9-11 years	12-13 years	14-18 years
Boys	2½	4½	5	5½	5½
Girls	2½	4½	5	5	5

What is a serve of vegetables*?

A standard serve is about 75g (100–350kJ) or:

- ½ cup cooked green or orange vegetables (for example, broccoli, spinach, carrots or pumpkin)
- ½ cup cooked dried or canned beans, peas or lentils
- 1 cup green leafy or raw salad vegetables
- ½ cup sweet corn
- ½ medium potato or other starchy vegetables (sweet potato, taro or cassava)
- 1 medium tomato



*With canned varieties, choose those with no added salt

How much fruit should we eat?

Most Australians eat only about half the recommended quantity of fruit. However many of us drink far too much fruit juice – whole fruit is preferable to juice.

The minimum recommended intake of fruit ranges from 1 serve a day for 2–3 year olds to 1½ serves a day for 4–8 year olds, and at least 2 serves a day for older children, adolescents and adults, including pregnant and breastfeeding women.

For more information go to:

www.eatforhealth.gov.au

Minimum recommended number of serves of fruit per day

	Serves per day		
	19-50 years	51-70 years	70+ years
Men	2	2	2
Women	2	2	2
Pregnant women	2	-	-
Breastfeeding women	2	-	-

	Serves per day				
	2-3 years	4-8 years	9-11 years	12-13 years	14-18 years
Boys	1	1½	2	2	2
Girls	1	1½	2	2	2

What is a serve of fruit?

A standard serve is about 150g (350kJ) or:

- 1 medium apple, banana, orange or pear
- 2 small apricots, kiwi fruits or plums
- 1 cup diced or canned fruit (no added sugar)

Or only occasionally:

- 125ml (½ cup) fruit juice (no added sugar)
- 30g dried fruit (for example, 4 dried apricot halves, 1½ tablespoons of sultanas)



Go for wholegrains

The grain (cereal) group includes breads, breakfast cereals, rice, pasta, noodles, polenta, couscous, bulgur, oats, quinoa and barley. These foods are made from grains such as wheat, oats, rice, rye, barley, millet, quinoa and corn. Wholemeal or wholegrain varieties are preferable because they provide more dietary fibre, vitamins and minerals than refined grain (cereal) foods.

Eating grain (cereal) foods, mostly wholegrain, can help protect us against heart disease, type 2 diabetes and excessive weight gain and may help reduce risk of some cancers.

Grain (cereal) foods which have high amounts of added saturated fats, added sugars and/or salt such as most cakes, muffins, pies, pastries and biscuits are not included in this group but are classified under 'discretionary choices' (see pages 27 and 34).

How much grain (cereal) foods should we eat?

Most Australians consume less than half the recommended quantity of wholegrain foods, but eat too much refined grain (cereal) foods. At least two-thirds of our choices should be wholegrain varieties.

Recommended intake of grain (cereal) food for children ranges from 4 serves a day for 2–8 year olds to 7 serves a day for older adolescents. For women, recommended intake ranges from 3 serves a day for those over the age of 70, to 6 serves a day for women less than 50 years of age. Recommended intake of grain (cereal) food for pregnant and breastfeeding women is 8½ serves a day. For men, recommended intake ranges from 4½ serves a day for those over the age of 70 years to 6 serves a day for younger men.

These amounts may seem generous, but the serve sizes are often small compared to the actual amount eaten. For example, 2 slices of bread is equal to 2 serves. The recommended quantities of these foods, like those in each of the other four food groups, should be consumed in preference to discretionary choices.

For more information go to:

www.eatforhealth.gov.au

Minimum recommended number of serves of grain (cereal) foods per day, mostly wholegrain and/or high cereal fibre varieties

	Serves per day		
	19-50 years	51-70 years	70+ years
Men	6	6	4½
Women	6	4	3
Pregnant women	8½	-	-
Breastfeeding women	9	-	-

	Serves per day				
	2-3 years	4-8 years	9-11 years	12-13 years	14-18 years
Boys	4	4	5	6	7
Girls	4	4	4	5	7

What is a serve of grain* (cereal) food?

A standard serve is (500kJ) or:

- 1 slice (40g) bread
- ½ medium (40g) roll or flat bread
- ½ cup (75-120g) cooked rice, pasta, noodles, barley, buckwheat, semolina, polenta, bulgur or quinoa
- ½ cup (120g) cooked porridge
- ⅔ cup (30g) wheat cereal flakes
- ¼ cup (30g) muesli
- 3 (35g) crispbreads
- 1 (60g) crumpet
- 1 small (35g) English muffin or scone



*Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties

Choose lean meat and poultry, fish, eggs and/or plant-based alternatives

Eating a variety of foods from the group containing lean meats and poultry, fish, eggs, nuts and seeds, and legumes/beans provides many nutrients, including protein, iron, zinc and other minerals and vitamins, particularly those of the vitamin B group. Vitamin B₁₂ is found mainly in animal-based products.

Lean red meat is high in iron and can be an important food, especially for some groups including infants, children, women (particularly when pregnant) and athletes. However, regular consumption of larger quantities of red meat may be associated with increased risk of colorectal cancer.

Fish, especially oily fish such as salmon and tuna, can be a valuable source of essential omega-3 fatty acids. Small quantities of these fatty acids are also found in lean grass-fed red meat, poultry and some eggs. Regular consumption of fish may help reduce risk of heart disease, stroke, dementia in older adults and macular degeneration in the eyes.

Fresh, frozen and canned varieties of meats, poultry or fish are all suitable, but choose varieties that are low in salt and saturated fat. Processed meats such as salami, mettwurst, bacon and ham are not part of this food group. They are classified as discretionary choices because they are high in saturated fat and/or salt. Consuming processed meat may be associated with an increased risk of colorectal cancer.

Eggs provide a low cost, easy-to-prepare source of protein and other nutrients.



Alternatives to animal foods include nuts, seeds, legumes, beans and tofu. For all Australians, these foods increase dietary variety and can provide a valuable, affordable source of protein and other nutrients found in meats. These foods are also particularly important for those who follow vegetarian or vegan dietary patterns.

Australians following a vegetarian diet can still meet nutrient requirements if energy needs are met and the appropriate number and variety of serves from the Five Food Groups are eaten throughout the day. For those eating a vegan diet, supplementation of B₁₂ is recommended. For further information seek the advice of an Accredited Practising Dietitian.

How much lean meat and poultry, fish, eggs, nuts and seeds, and legumes/beans should we eat?

The *Guidelines* recommend that you eat 1–3 serves of these foods each day, depending on age. During pregnancy, 3½ serves a day are recommended. See the next page for examples of how much is a serve.

Looking at the individual types of food consumed over a week, a maximum of 455g of lean, cooked, red meat per week is recommended.

Many adults eat meat, poultry or fish in larger portion sizes than the standard serve sizes outlined on the next page. This is not a problem if you compensate for a large serving by consuming the food less often. For example, instead of having 100g cooked weight of fish twice per week you could have 200g cooked weight once per week; or instead of having 65g of red meat every day, you could have twice as much on every second day.

Some population groups such as children and young women may need to increase their intake of lean red meat, but most Australian men eat more red meat than is recommended and would benefit from reducing their intake.

For older children and adult Australians who eat foods from animal sources, around 2 serves of fish per week is recommended. For children less than 8 years of age, up to around 1–1½ serves per week is recommended.

Whole nuts and seeds are not recommended for children aged 3 years or under because of potential choking problems – nut butters or nut pastes can be used instead.

For more information go to:

www.eatforhealth.gov.au

Minimum recommended number of serves of lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans per day

	Serves per day		
	19-50 years	51-70 years	70+ years
Men	3	2½	2½
Women	2½	2	2
Pregnant women	3½	-	-
Breastfeeding women	2½	-	-

	Serves per day				
	2-3 years	4-8 years	9-11 years	12-13 years	14-18 years
Boys	1	1½	2½	2½	2½
Girls	1	1½	2½	2½	2½

How much is a serve of lean meat and poultry, fish, eggs, nuts and seeds, and legumes/beans*?

A standard serve is (500–600kJ):

- 65g cooked lean red meats such as beef, lamb, veal, pork, goat or kangaroo (about 90-100g raw)
- 80g cooked lean poultry such as chicken or turkey (100g raw)
- 100g cooked fish fillet (about 115g raw) or one small can of fish
- 2 large (120g) eggs
- 1 cup (150g) cooked or canned legumes/beans such as lentils, chick peas or split peas
- 170g tofu
- 30g nuts, seeds, peanut or almond butter or tahini or other nut or seed paste



*Choose those with no added salt

Include milk, yoghurt and cheese and/or alternatives— mostly reduced fat

Milk, yoghurt and cheese are rich sources of calcium and other minerals, protein, and vitamins, including B₁₂.

Consumption of milk, yoghurt and cheese can protect us against heart disease and stroke, can reduce our risk of high blood pressure and some cancers, may reduce our risk of Type 2 diabetes and may contribute to stronger bones.

However, choosing mostly full fat varieties can increase the saturated fat and energy (kilojoule) content in the diet. A wide range of milk products of varying fat levels are now available in Australia. Milk can be fresh, powdered, evaporated or UHT long life. There are cheeses available that have reduced levels of fat and/or salt.

Some other milk products, such as ice-cream, can be relatively high in saturated fat and added sugars, so are classified under discretionary choices, together with cream and butter.

Infants under the age of 12 months should not be given cow's milk as the main milk drink, but this can be served in small quantities on cereal or as part of custards with no added sugars. Breastmilk or specially prepared infant formula should be given to infants under 12 months of age as the main milk source.

Children under two years of age have relatively high energy requirements and are growing rapidly, so full cream milks, yoghurts and cheeses are recommended for them. Over two years of age, the preferred choices are reduced fat milks, yoghurts and cheeses or calcium-enriched alternatives. Milk products and calcium-enriched alternatives are particularly important foods for growing children and adolescents.

Alternative dairy options

For those who prefer to avoid dairy products, choose alternative products that have added calcium, such as calcium-enriched soy or rice drinks. Check the nutrition information panel on the label of these products to ensure they contain at least 100 mg of calcium per 100ml. Fish with bones (such as sardines or salmon), almonds or tofu can be rich sources of calcium. Seafood (especially mussels, oysters and prawns) and many plant foods (especially seeds, grain-based foods, and green leafy vegetables) contain some calcium too.

Some people choose to follow a dairy-free or milk-free diet because of allergies, intolerances to lactose (the natural sugar in milk), or because they believe that milk increases mucus. However there is no scientific evidence of any link between dairy products and mucus production. Dietary patterns that restrict intake of foods from any of the Five Food Groups can be less than ideal for nutritional status. Allergies and intolerances should always be diagnosed by a doctor. If an allergy is diagnosed, an Accredited Practising Dietitian can advise about alternative foods.

How much milk, yoghurt, cheese and/or alternatives should we eat every day?

Most Australians consume only about half the recommended quantity of milk products or alternatives, but consume too many full fat varieties of these foods and should increase their intake of reduced fat varieties. Full fat cheeses should be limited to 2–3 serves per week, and varieties which are lower in salt are preferable.

The minimum recommended amount of milk, yoghurt, cheese and/or alternatives ranges from 1½-2 serves a day for children up to 8 years old to 2½-3½ serves a day for older children and adolescents; 2½ serves a day for younger adults, pregnant and breastfeeding women, and from 3½-4 serves a day for older adults, particularly women.

For more information go to:

www.eatforhealth.gov.au

Minimum recommended number of serves of milk, yoghurt, cheese and/or alternatives per day, mostly reduced fat

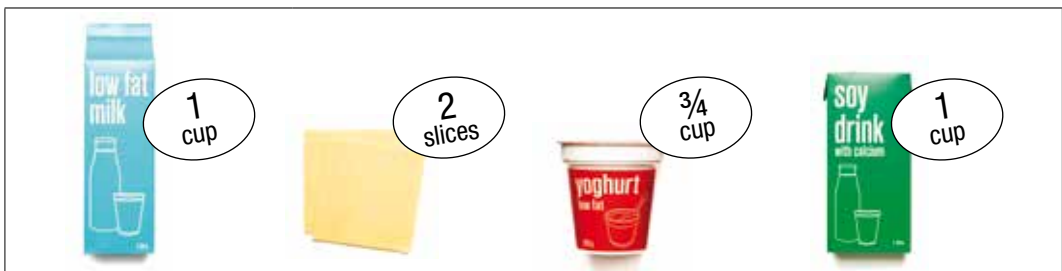
	Serves per day		
	19-50 years	51-70 years	70+ years
Men	2½	2½	3½
Women	2½	4	4
Pregnant women	2½	-	-
Breastfeeding women	2½	-	-

	Serves per day				
	2-3 years	4-8 years	9-11 years	12-13 years	14-18 years
Boys	1½	2	2½	3½	3½
Girls	1½	1½	3	3½	3½

How much is a serve of milk*, yoghurt*, cheese* and/or alternatives?

A standard serve is (500–600kJ):

- 1 cup (250ml) fresh, UHT long life, reconstituted powdered milk or buttermilk
- ½ cup (120ml) evaporated milk
- 2 slices (40g) or 4 x 3 x 2cm cube (40g) of hard cheese, such as cheddar
- ½ cup (120g) ricotta cheese
- ¾ cup (200g) yoghurt
- 1 cup (250ml) soy, rice or other cereal drink with at least 100mg of added calcium per 100ml



The following foods contain about the same amount of calcium as a serve of milk, yoghurt or cheese:

- 100g almonds with skin
- 60g sardines, canned in water
- ½ cup (100g) canned pink salmon with bones
- 100g firm tofu (check the label as calcium levels vary)

*Choose mostly reduced fat

Water is essential for life

Australian tap water is an ideal drink – it's inexpensive, tastes good and is safe in most areas of the country. Fluoridated tap water helps develop strong bones and teeth.

Choose water instead of drinks with added sugars or alcohol. The amount of water we need varies depending on individual factors including diet, climate and levels of physical activity. Some older people and young children may benefit from drinking water regularly before they feel thirsty.

Tea and coffee provide water, although they are not suitable for young children and large quantities can have unwanted stimulant effects in some people.

Consumption of drinks with added sugars, such as soft drinks and cordials, fruit drinks, vitamin waters, energy and sports drinks can increase risk of excessive weight gain in both children and adults.

Water has an advantage over these drinks, and also over fruit juice and artificially sweetened soft drinks, because it has no kilojoules and a low acidity – acidity can erode the enamel of the teeth.

Soft drinks may also increase the risk of dental caries and may have a negative impact on the strength of our bones.

Breastmilk supplies adequate fluid up to around six months of age. From around six months, small amounts of cooled boiled water can supplement breastmilk. For formula-fed infants of all ages, cooled boiled tap water may be used at any time if additional fluids are needed.

For more information go to:

www.eatforhealth.gov.au



WHAT ABOUT FOODS AND DRINKS THAT ARE NOT PART OF THE FIVE GROUPS?

Food and drinks which are not part of the Five Food Groups are shown outside the central 'plate' (or main circle) in the *Australian Guide to Healthy Eating* on page 4.

Unsaturated spreads and oils

Unsaturated spreads and oils appear in the bottom left-hand corner of the *Australian Guide to Healthy Eating* on page 4. These foods contain mostly unsaturated (polyunsaturated or monounsaturated) fats. Small amounts of unsaturated spreads and oils, or extra quantities of the nuts and seeds from which they are made may have health benefits and can be included in the diet. For more on foods with polyunsaturated or monounsaturated fatty acids, see page 30.

The amount of unsaturated spreads or oils, nuts or seeds included in usual dietary patterns is linked to individual energy needs.

Discretionary choices

'Discretionary choices' are called that because they are not an essential or necessary part of healthy dietary patterns. These foods and drinks appear in the bottom right-hand corner of the *Australian Guide to Healthy Eating* on page 4. Discretionary choices are high in kilojoules, saturated fat, added sugars and/or salt or alcohol. Most Australians consume too many discretionary choices instead of choosing foods from the Five Food Groups.

Examples of discretionary choices include: most sweet biscuits, cakes, desserts and pastries; processed meats and sausages; ice-cream and other ice confections; confectionary and chocolate; savoury pastries and pies; commercial burgers; commercially fried foods; potato chips, crisps and other fatty and/or salty snack foods; cream, butter and spreads which are high in saturated fats; sugar-sweetened soft drinks and cordials, sports and energy drinks and alcoholic drinks.

If chosen, discretionary choices should be eaten only sometimes and in small amounts.

While discretionary choices can help contribute to the overall enjoyment of eating, often as part of social activities and family or cultural celebrations, most Australians need to **eat these foods less often and in much smaller amounts**, and greatly increase physical activity to 'burn off' the added kilojoules from discretionary choices to help prevent gaining excessive weight. If you are short, small, above your healthiest weight or not very physically active, there may be little or no room in your usual dietary pattern for any discretionary choices at all, or the portion size needs to be quite small.

For more ideas on how to make healthier food choices go to:

www.eatforhealth.gov.au

GUIDELINE 3: LIMIT INTAKE OF FOODS CONTAINING SATURATED FATS, ADDED SALT, ADDED SUGARS AND ALCOHOL

- a. **Limit intake of foods high in saturated fat such as many biscuits, cakes, pastries, pies, processed meats, commercial burgers, pizza, fried foods, potato chips, crisps and other savoury snacks.**
 - Replace high fat foods which contain predominately saturated fats such as butter, cream, cooking margarine, coconut and palm oil with foods which contain predominately polyunsaturated and monounsaturated fats such as oils, spreads, nut butters/pastes and avocado.
 - Low fat diets are not suitable for children under the age of 2 years.
- b. **Limit intake of foods and drinks containing added salt.**
 - Read labels to choose lower sodium options among similar foods.
 - Do not add salt to foods in cooking or at the table.
- c. **Limit intake of foods and drinks containing added sugars such as sugar-sweetened soft drinks and cordials, fruit drinks, vitamin waters, energy and sports drinks.**
- d. **If you choose to drink alcohol, limit intake. For women who are pregnant, planning a pregnancy or breastfeeding, not drinking alcohol is the safest option.**

Dietary patterns featuring foods and drinks containing significant amounts of saturated fats, added salt, added sugars and alcohol are associated with increased risk of obesity and chronic diseases including heart disease, stroke, type 2 diabetes and some cancers.

Most of these foods and drinks are not a necessary part of our diet and are classified as discretionary choices. Australians consume too many of these foods and drinks instead of choosing foods from the Five Food Groups. Discretionary choices should be used only sometimes and in small amounts.

For more information go to:

www.eatforhealth.gov.au

Not all fats are equal

Fats can help make food more palatable and some oils contain unsaturated fats (polyunsaturated and monounsaturated) that are essential for health. Some foods containing fat provide vitamins including vitamin A, D and E. But different types of fats have different effects on our health and all fats are high in kilojoules, so both the types and amounts of foods containing fat need to be chosen carefully.

Fats can be classified as saturated, monounsaturated or polyunsaturated fats, depending on their chemical structure. Trans fats act like saturated fats in the body. Trans fats can be found naturally in the fat from meat and milk from certain animals and hydrogenated vegetable oils used to make some processed foods. The amount of trans fats in processed foods is declining in Australia and our overall intake is low. However, it is important to ensure that intake remains at its current low level.

Saturated fats increase our risk of heart disease. It is important to replace foods containing saturated fats with foods that contain unsaturated fats, that is, either monounsaturated or polyunsaturated fats.

All Australians should include some foods that contain unsaturated fats in their usual dietary patterns. The amount depends on our individual energy needs.

Low-fat diets are not suitable for infants due to their relatively high energy requirements. For older children, adolescents and adults, dietary patterns low in saturated fat are recommended. See page 31 for tips.

For more information go to:

www.eatforhealth.gov.au

► What foods contain saturated fats?

Saturated fats are found in:

- butter and cream
- lard and dripping
- coconut and palm kernel oils
- biscuits
- cakes
- pastries and pies
- processed meats
- commercial burgers
- pizzas and fried foods
- potato chips and crisps
- sausages
- untrimmed meats
- full cream dairy products, especially cheese



► What foods contain unsaturated fats?

Unsaturated fats

Unsaturated (polyunsaturated and monounsaturated) fats are found in foods in the Five Food Groups, especially in:

- seeds
- nuts
- legumes/beans
- avocado
- oats
- fish
- lean grass-fed meat
- poultry
- eggs

Foods with mostly polyunsaturated fats

- sunflower and safflower seeds
- soybeans
- cottonseeds
- sesame seeds
- corn and grape seeds

Foods with mostly monounsaturated fats

- canola seeds
- most nuts
- rice bran
- avocados and olives



Standard serve size equivalents unsaturated fats/oils/spreads

Food group	Serve sizes
Unsaturated fats/oils/spreads	10g polyunsaturated spread
	10g monounsaturated spread
	7g polyunsaturated oil, for example olive or canola oil
	10g tree nuts or peanuts or nut pastes/butters

See pages 41–44 for further information on recommended dietary allowances.

Tips to eat less saturated fat

- ▶ Eat fish and legumes/beans more often.
- ▶ Cut down on dishes with cream, buttery or creamy sauces or fatty gravy, instead choose tomato-based dishes.
- ▶ Replace sour cream or coconut milk with light evaporated milk or plain yoghurt.
- ▶ Use reduced fat yoghurt, vinegar, lemon juice, herbs and small amounts of unsaturated oils for dressings.
- ▶ Don't deep fry foods. Instead, sauté, stir-fry, grill, bake, steam, boil, microwave, poach or barbeque. Use small amounts of unsaturated oils if needed.
- ▶ Choose bread-based takeaways (sandwiches, rolls and wraps) rather than commercially baked or fried foods like pies, sausage rolls, chips, fried chicken and battered and fried seafood.
- ▶ Order a side salad or vegetables, instead of hot chips.
- ▶ Choose vegetable toppings on pizza, rather than extra cheese, ham or salami.
- ▶ Choose packaged foods which state they are reduced in fat or low in fat. But beware that these may contain more added sugars than regular varieties of these foods!
- ▶ Use small amounts of unsaturated spreads and oils instead of butter.
- ▶ Choose reduced or low-fat milk, yoghurt and cheese.

For more ideas on how to reduce saturated fat intake go to:

www.eatforhealth.gov.au

Beware of added sugars

It's not the naturally occurring sugars in fruit, vegetables or milk products that are a problem. It's the foods and drinks with sugars added as a sweetener, flavour enhancer or preservative that we need to limit.

Added sugars can increase the kilojoule content of our diet and reduce our intake of important nutrients when we eat these foods in place of foods from the Five Food Groups. High or frequent intake of foods and drinks containing added sugars can lead to tooth decay in both children and adults. Recent evidence shows that intake of sugar-sweetened drinks can increase the risk of excessive weight gain in both children and adults.

Limit foods high in added sugars including jams, marmalades, confectionary, syrups and sweetened sauces and dressings, biscuits, cakes, sweet muffins, doughnuts, slices, puddings, sweet pastries, pies and crumbles, ice-cream, chocolate and muesli bars.

Particularly limit intake of drinks high in added sugars including sugar sweetened soft drinks cordials, fruit drinks, vitamin waters, energy and sports drinks.

Foods and drinks that are artificially sweetened can provide a useful alternative to those high in added sugars. But artificially sweetened soft drinks are still acidic and may erode tooth enamel so only drink them sometimes and in small amounts.

Tips to limit added sugars

- ▶ **Train your tastebuds to rely less on sweetness, by gradually reducing the sugar you add to foods and your intake of foods containing added sugars.**
- ▶ **How many sugars do you have with your cuppa? Try to cut down gradually to zero.**
- ▶ **Keep to a minimum the amount of sugars, honey, sweetened sauces or syrups added to foods and made at home – or avoid adding sugars at all.**
- ▶ **Go for fruit instead of biscuits, cakes, muffins, chocolate or lollies. Keep a bowl of fruit handy on the bench or cool in the fridge.**
- ▶ **If you have dessert, share with a friend.**
- ▶ **Avoid sweetened drinks. Keep a jug of chilled water in the fridge. Adding slices of lemon or mint for variety.**
- ▶ **Infants should be put to bed without a bottle or the bottle should be taken away when the infant has finished feeding. Do not let the infant keep sucking on the bottle.**

For more ideas on how to eat less added sugars go to:

www.eatforhealth.gov.au

Too salty

Most Australians eat too much salt. Salt can help enhance flavour and preserve some foods. But salt is the main source of sodium in our diet – and too much sodium is not good for our health.

Cutting down on sodium reduces blood pressure in adults and children. This is particularly important if blood pressure is already too high. Decreasing intake of sodium may also help reduce the risk of heart disease and stroke.

Most of the sodium we eat comes from the salt added to processed foods.

Tips to eat less salt

- ▶ Limit intake of foods high in salt including processed meats like bacon, ham, corned beef, devon and fritz, high salt breakfast cereals (choose those with less than 120mg sodium/100g), crispbreads, cheese and foods such as fish or vegetables canned with added salt or in brine (salted water).
- ▶ Read food labels to choose lower sodium options among similar foods. Nutrition information panels tell us how much sodium is in packaged foods. For more information about reading food labels go to www.eatforhealth.gov.au.
- ▶ Choose packaged foods with labels stating they contain 'no added salt' or are low or reduced in salt/sodium. Ingredient lists can also help identify if sodium or salt is added.
- ▶ Instead of adding salt to food during cooking or at the table, use pepper, fresh or dried herbs or spices, or lemon or garlic.
- ▶ Remember, a food may be high in salt even if it doesn't taste salty.
- ▶ Train your tastebuds to enjoy less salty food. Cut down on added salt gradually.

For more ideas on how to eat less salt go to:

www.eatforhealth.gov.au

Alcohol

Alcohol is a food as well as a drug and is high in energy (kilojoules). Some studies show that small amounts of alcohol may help reduce heart disease and risk of dementia. But, the NHMRC *Australian guidelines to reduce health risks from drinking alcohol (2009)* note that any potential cardiovascular benefit can also be gained by other means such as modifying the diet or exercise. Even small amounts of alcohol can be associated with increased risk of some cancers.

Alcoholic drinks such as beer, wines, spirits and fortified wines increase the kilojoule content of the diet. Sugar-sweetened alcoholic drinks add a further risk for excessive weight gain.

If you choose to drink alcohol, limit intake. It is recommended that healthy men and women drink no more than two standard drinks on any one day, and no more than four standard drinks on a single occasion. Not drinking alcohol is the safest option for women who are pregnant or planning a pregnancy, or breastfeeding.

Children under 15 years of age are at the greatest risk of harm from drinking alcohol and should not drink. For young people aged 15–17 years, the safest option is to delay the initiation of drinking for as long as possible.

For further information see NHMRC *Australian guidelines to reduce health risks from drinking alcohol (2009)* or go to:

www.eatforhealth.gov.au

What is a serve of discretionary choices?

A serve of Discretionary choices provides about 500-600 kilojoule:

2 scoops (75g)	ice-cream
2 slices (50-60g)	processed meats, salami or mettwurst
1½ thick or 2 thin (50-70g)	regular sausages
½ snack-size packet (30g)	salty crackers or crisps
2-3 (35g)	sweet plain biscuits
1 (40g)	doughnut
1 slice (40g)	plain cake/small cake-type muffin
5-6 (40g)	sugar confectionary/small lollies
1 tblsp (60g)	jam or honey
½ bar (25g)	chocolate
2 tblsp (40g)	cream
1 tblsp (20g)	butter
1 can (375ml)	soft drink (sugar-sweetened)
¼ pie or pastie (60g)	commercial meat pie or pastie (individual size)
12 (60g)	fried hot chips
200ml	wine (2 standard drinks; but note this is often 1 glass for many Australian wines)
60ml	spirits (2 standard drinks)
600ml	light beer (1½ standard drinks)
400ml	standard beer (1½ standard drinks)



GUIDELINE 4: ENCOURAGE, SUPPORT AND PROMOTE BREASTFEEDING

Breastmilk is the ideal food for infant growth and development. Breastfeeding provides many benefits for mothers as well as infants, both now and into the future.

Breast is best

Breastfeeding is the healthiest start for infants. For the infant, breastmilk provides a unique mix of nutrients and other important substances that can reduce the risk of infection and may also help reduce the risk of asthma, eczema and other allergies, and sudden infant death syndrome.

Research shows that, amongst other benefits, being breastfed can reduce the risk of high blood pressure in childhood and may reduce the risk of becoming obese in childhood, adolescence and adulthood. This, in turn, may also reduce the risk of chronic diseases like Type 2 diabetes, heart disease and stroke in later life.

For the mother, breastfeeding can help recovery from birth and, may also help mothers return to their pre-pregnancy weight and reduce their risk of some cancers.

Breastmilk is a natural, convenient, hygienic and inexpensive food for babies.

Supporting breastfeeding mothers

Breastfeeding is best however sometimes this is not possible. All mothers need support from family and friends in choosing what is best for them. Babies who are not breastfed need an infant formula.

It's particularly important for mothers to eat well when they're breastfeeding. New mothers may be dealing with lack of sleep as well as extra nutrient needs. Helping mothers with meals and daily chores can make a difference.

Public spaces like shopping centres and restaurants, and workplaces can support breastfeeding mothers by providing facilities for their use. We can all play a part to help everyone see that breastfeeding is the natural, normal and healthy way to feed our babies. But all mothers and families need support, no matter what feeding choices they make for their babies.

Child health nurses, lactation consultants, doctors and other health professionals can provide help if mothers and families are having any problems with infant feeding.

For additional information on healthy eating when pregnant or breastfeeding go to:

www.eatforhealth.gov.au

► Exclusive breastfeeding for around the first six months

It is recommended that infants are exclusively breastfed for around the first six months of life. This means that they are given breastmilk and nothing else during this time. Breastfeeding provides all the nutrients and fluids a baby needs.

Breastfeeding should continue until the baby is 12 months old, or for as long as both the mother and infant want to keep going. But any breastfeeding is beneficial to the infant and mother.

By around six months of age, solid foods such as iron-fortified infant cereals, puréed meats, tofu and legumes followed by vegetables, fruits and other nutritious foods can be introduced to the baby. Introduce different tastes and textures as the baby grows. By 12 months of age, infants should be consuming a wide variety of nutritious foods enjoyed by the rest of the family.



GUIDELINE 5: CARE FOR YOUR FOOD; PREPARE AND STORE IT SAFELY

We have a reliable, safe and nutritious food supply in Australia. But food poisoning happens too frequently.

All foods, and particularly fresh foods, need to be transported, stored and prepared properly to avoid contamination. This is particularly important when we are preparing food to eat later.

Food poisoning occurs when we eat contaminated foods or drinks. Contamination can occur when foods aren't kept at the right temperature, when raw foods aren't separated from cooked and ready to eat foods, when food preparation tools aren't cleaned properly or the people preparing foods are unwell and don't follow good personal hygiene practices. Fresh or perishable foods are especially at risk of contamination. We can get the best from our food – retaining its freshness and nutritional value – by preparing and storing it safely.

Who's most at risk of food poisoning?

Symptoms of food poisoning can include stomach cramps, nausea, vomiting, diarrhoea, headache and fever. Depending on the cause, it may start within an hour or weeks after eating contaminated food.

Most healthy people recover quickly from most types of food poisoning. But some people suffer badly. Those more at risk include those with weakened immune systems, as well as pregnant women, infants and older people.



► Choosing and storing food

- If buying packaged food, check its 'best-before' or 'use-by' date.
- Use an esky, insulated bag or box with an ice pack if you need to travel more than half an hour home or if it's hot outside. Store your food at home as soon as you can.
- Chill foods in the fridge to slow growth of micro-organisms. Keep cool foods cool and frozen foods frozen.
- Keep fridges at or below 5°C and the freezer between -15° and -18°C.
- Keep your fridge and freezers clean. And get rid of those old shrivelled vegetables, 'left-overs' or frozen foods lurking in the corners for too long!
- Store foods away from cleaning agents and insecticides.
- If you are not going to eat cooked dishes and foods straight away, put them in the fridge as soon as you can.



For more information go to:
www.eatforhealth.gov.au



▶ PREPARE FOODS SAFELY

- Wash your hands before touching food, and after going to the toilet, touching animals, changing nappies or blowing your nose. Use soap and warm running water and dry your hands on a clean towel.
- Wash fruit and vegetables thoroughly with clean water before you eat or prepare them.
- Keep your food preparation areas clean, particularly the surfaces, cutting boards and any bowls and utensils used.
- Don't allow raw foods, like eggs, meat, chicken or seafood, to be in contact with cooked or ready-to-eat foods. Keep cutting boards and serving plates separate.
- Foods, particularly poultry and meats, need to be cooked thoroughly, and at the right temperature.
- Avoid preparing foods if you are sick. Put a band aid on any cuts or sores.

PULLING THINGS TOGETHER

Which foods should I eat and how much?

Examples of daily food patterns for different age/gender groups and physical activity levels (from sedentary to light/moderate levels) are shown in the sample daily food pattern tables on pages 41–44. These tables provide a guide to the approximate amounts of foods from the Five Food Groups and any additional foods needed by taller or more active people (from either the Five Food Groups or unsaturated spreads and oils or discretionary choices).

Few people eat exactly the same way each day and it is common to have a little more on some days than others, but the average recommendations are shown per day to help make it easier to put into practice. There are many different ways to combine foods according to the *Australian Dietary Guidelines* to produce health benefits.

The average amounts in the sample daily food pattern tables provide the nutrients everyone needs. But to avoid gaining excess weight, smaller or less active (sedentary) people in each group have little, if any, room for additional serves. Those above their healthiest weight should avoid additional serves. Depending on height, weight and physical activity levels, taller or more physically active adults in each group (or older, taller or more physically active children and adolescents in each group) can have additional serves of the Five Food Groups or unsaturated spreads and oils, or discretionary choices.

The serve sizes of the foods from the Five Food Groups are the same as explained in Guideline 2 on pages 12–27. Examples of serves of discretionary choices are included on pages 34.

More information on serves and understanding portion size can be found at:

www.eatforhealth.gov.au



SAMPLE DAILY FOOD PATTERNS FOR ADULTS

Recommended average daily number of serves from each of the Five Food Groups*							Additional serves for taller or more active men and women
	Age	Vegetables and legumes/beans	Fruit	Grain (cereal) foods, mostly wholegrain and/or high fibre cereal varieties	Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans	Milk, yoghurt, cheese and/or alternatives, mostly reduced fat	Approx. number of additional serves from the Five Food Groups or unsaturated spreads and oils or discretionary choices
Men	19–50	6	2	6	3	2½	0–3
	51–70	5½	2	6	2½	2½	0–2½
	70+	5	2	4½	2½	3½	0–2½
Women	19–50	5	2	6	2½	2½	0–2½
	51–70	5	2	4	2	4	0–2½
	70+	5	2	3	2	4	0–2
Pregnant	(19–50)	5	2	8½	3½	2½	0–2½
Breastfeeding	(19–50)	7½	2	9	2½	2½	0–2½

* Includes an allowance for unsaturated spreads or oils and nuts or seeds: 4 serves [28–40g] per day for men less than 70 years of age; 2 serves [14–20g] per day for women and older men.

For more information including sample meal plans and recipes go to:

www.eatforhealth.gov.au

SAMPLE DAILY FOOD PATTERNS FOR CHILDREN AND ADOLESCENTS

Recommended average daily number of serves from each of the Five Food Groups*							Additional serves for more active, taller or older children and adolescents
	Age	Vegetables and legumes/ beans	Fruit	Grain (cereal) foods, mostly wholegrain and/or high fibre cereal varieties	Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans	Milk, yoghurt, cheese and/or alternatives, mostly reduced fat	Approx. number of additional serves from the Five Food Groups or unsaturated spreads and oils or discretionary choices
Boys	2-3	2½	1	4	1	1½	0-1
	4-8	4½	1½	4	1½	2	0-2½
	9-11	5	2	5	2½	2½	0-3
	12-13	5½	2	6	2½	3½	0-3
	14-18	5½	2	7	2½	3½	0-5
Girls	2-3	2½	1	4	1	1½	0-1
	4-8	4½	1½	4	1½	1½	0-1
	9-11	5	2	4	2½	3	0-3
	12-13	5	2	5	2½	3½	0-2½
	14-18	5	2	7	2½	3½	0-2½
Pregnant		5	2	8	3½	3½	0-3
Breastfeeding		5½	2	9	2½	4	0-3

* Includes an allowance for unsaturated spreads or oils and nuts or seeds: ½ serve [4–5g] per day for children 2–3 years of age, 1 serve [7–10g] per day for children 3–12 years of age, 1½ serves [11–15g] per day for children 12–13 years of age, and 2 serves [14–20g] per day for adolescents 14–18 years of age and for pregnant and breastfeeding girls.

For more information on healthy foods during childhood and adolescents go to:

www.eatforhealth.gov.au

SAMPLE DAILY FOOD PATTERNS FOR TODDLERS

A sample daily food pattern for toddlers aged 13–23 months is shown in the table below. This is a guide only as there can be wide variations at this age. The amounts shown relate to the same serve sizes as older children and adults, but most toddlers will consume much smaller quantities at any one time but have these foods more frequently. Appropriate growth and development will also indicate whether food intake is at a suitable overall level for an individual child. Regular growth checks by a child health professional are encouraged.

Food*	Serve size	Serves a day
Vegetables and legumes/beans	75g	2-3
Fruit	150g	½
Grain (cereal) foods	40g bread equivalent	4
Lean meats, poultry, fish, eggs, tofu, legumes/beans	65g	1
Milk, yoghurt, cheese and/or alternatives	250ml milk equivalent	1-1½

* An allowance for unsaturated spreads or oils or nut/seed paste of 1 serve (7–10g) per day is included. Whole nuts and seeds are not recommended for children of this age because of the potential choking risk.

For more information on healthy foods for toddlers go to:

www.eatforhealth.gov.au



SAMPLE DAILY FOOD PATTERNS FOR INFANTS AGED 7–12 MONTHS

It is recommended that infants should be exclusively breastfed to around 6 months of age. If this is not possible, infant formula should be used.

For all infants, recommended nutrient intakes are based on the nutrient profile of breastmilk for infants up to 6 months and on estimates of the nutrients provided by breastmilk or formula and complementary foods for infants 7–12 months of age.

Introduce first foods at around 6 months, starting with iron-fortified infant cereal and/or iron rich foods such as pureed meat, followed by other foods from the Five Food Groups.

A sample daily food pattern for infants aged 7–12 months is shown in the table below. This is a guide only as individual needs may vary. As you would expect, infants progressively increase the volume and variety of foods they eat during 7-12 months of age. Appropriate growth and development will help to indicate whether food intake is at a suitable overall level for each individual infant.

Some serve sizes have been adjusted to account for the small amounts that may be consumed by infants at any one time, while common foods for this age group such as infant cereal have been included. Regular growth checks by a child health professional are encouraged.

Food*	Serve size	Serves a day	Serves a week
Vegetables and legumes/beans	20g	1½-2	10-14
Fruit	20g	½	3-4
Grain (cereal) foods	40g bread equivalent	1½	10
Infant cereal (dried)	20g	1	7
Lean meats, poultry, fish, eggs, tofu, legumes/beans	30g	1	7
Breast milk or formula	600ml	1	7
Yoghurt/cheese or alternatives	20ml yoghurt or 10g cheese	½	3-4

* An allowance for unsaturated spreads or oils or nut/seed paste of ½ serve (4-15g) per day is included, however whole nuts and seeds are not recommended at this age because they may cause choking.

For more information on healthy foods for infants go to:

www.eatforhealth.gov.au



For more information contact:

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This booklet is available to download at:

www.eatforhealth.gov.au

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