Eating well for 12-18 year olds

Practical guide

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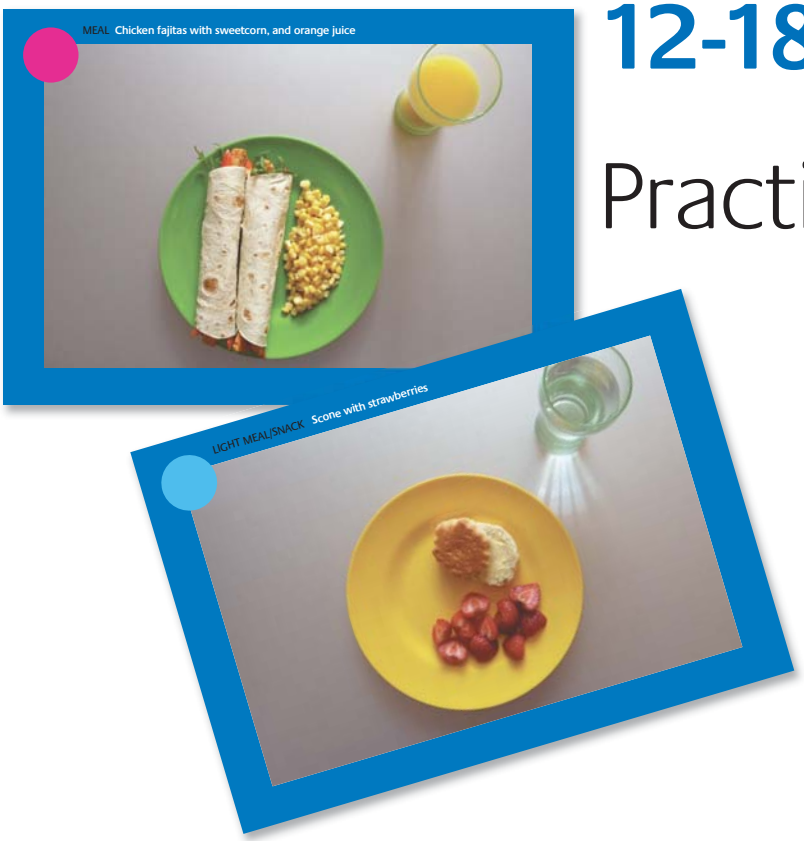

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This book includes a CD-ROM containing full-colour photos of breakfasts, meals, snacks and desserts for 12-18 year olds, with suggested portion sizes and recipes.

A set of printed A5 *Eating Well for 12-18 Year Olds: Food Photo Cards* is also available. The photo cards are printed versions of the materials provided on the CD-ROM above.

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Eating Well for 12-18 Year Olds: Practical Guide (including accompanying CD-ROM)

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Eating Well for 12-18 Year Olds: Practical Guide (including accompanying CD-ROM), plus set of printed ***Eating Well for 12-18 Year Olds: Food Photo Cards***

This resource is provided for information only and individual advice on diet and health should always be sought from appropriate health professionals.

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The Caroline Walker Trust

The Caroline Walker Trust is a charity which aims to improve public health through good food. For more information about The Caroline Walker Trust and how to obtain any of our publications, see our website www.cwt.org.uk

Other publications by The Caroline Walker Trust

For details see cwt.org.uk

Reports

Eating Well for Under-5s in Child Care

Eating Well at School

Eating Well for Looked After Children and Young People

Eating Well: Children and Adults with Learning Disabilities

Eating Well for Older People

Eating Well for Older People with Dementia (Published by VOICES. Now out of print but available to download from the CWT website www.cwt.org.uk)

Training materials

Eating Well for Under-5s in Child Care – Training Materials

Eating Well: Supporting Adults with Learning Disabilities – Training Materials

Photo resources

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Contents

Accompanying this book:

CD-ROM Eating Well for 12-18 Year Olds

This CD-ROM contains a selection of full-colour photos of breakfasts, meals, snacks and desserts for 12-18 year olds, with suggested portion sizes and recipes. It also contains a PDF of this book.

Also available:

Eating Well for 12-18 Year Olds: Food Photo Cards

A set of printed A5 food photo cards, with full-colour photos of breakfasts, meals, snacks and desserts for 12-18 year olds, with suggested portion sizes and recipes. These photo cards are printed versions of the materials provided on the CD-ROM above.

Introduction

This resource shows the sorts of foods, and amounts of foods, that will meet the nutritional needs of children and young people aged from 12 years to 18 years in the UK.

Why have we produced this resource?

We want to provide a visual resource to illustrate what a good diet actually looks like for 12-18 year olds. Young people need enough energy (calories) to grow and be active, and enough nutrients (protein, fat, carbohydrate, vitamins and minerals) to ensure that they remain healthy, fight infections, can be active and learn effectively. Experts have calculated the amounts of individual nutrients that they think young people in different age groups need. These are known as 'dietary reference values'. This resource gives information on how these dietary reference values for 12-18 year olds can be met in practice and the sorts of foods and amounts we should encourage young people to eat.

How can this resource be used?

This resource can be used:

- to help young people aged 12 to 18 years to eat well
- to summarise the key principles of eating well for 12-18 year olds
- to show how the nutritional needs of 12-18 year olds can be met with a variety of foods and drinks, and
- to show typical portion sizes to aim at for 12-18 year olds for the key foods that we want to encourage them to eat.

Who is it for?

This resource has been designed for all those who support young people aged 12-18 to eat well. This includes those responsible for menu planning or preparing food for 12-18 year olds, child carers, youth workers, social workers, teachers, family centre and residential workers, dietitians, registered public health nutritionists and community food workers, as well as the parents of young people.

What does the resource contain?

It contains:

- a summary of the key principles of eating well for young people aged 12 to 18 years
- a summary of how you can encourage young people to eat well throughout the day
- some sample eating plans to show how energy and nutrient needs can be met for young people with different energy needs
- photos of typical portion sizes of fruit and vegetables (which we want to encourage young people to eat more of)
- photos of some example breakfasts, meals, snacks and desserts, to help show how young people's nutritional needs can be met, and
- recipes of the dishes shown in the photos.

How are the materials organised?

In this book

Eating well for 12-18 year olds, on page 7, provides an outline of the key things to consider when helping 12-18 year olds to eat well.

The section **Sample meals and snacks for 12-18 year olds**, on page 33, includes some eating plans, giving an idea of the types and amounts of food needed for young people with different energy needs. Photos of a range of meals and snacks are provided on the accompanying CD-ROM (see the next page). This section explains how the meals and snacks and food photos for this age group were put together.

On page 49 there is information on **How to use the food photos**.

Fruit and vegetables: portion sizes for 12-18 year olds, on page 55, shows photos of suitable portion sizes for 12-18 year olds.

The **Additional information** section contains:

- *Food-based guidance* to help people think about the food they serve
- a list of *Good sources of vitamins and minerals*
- *Dietary reference values for 12-18 year olds,* and
- a *Resources* section with sources of further information.

CD-ROM

The CD-ROM **Eating Well for 12-18 Year Olds**, included with this book, contains photos of a variety of breakfasts, meals, snacks and desserts. These have been put together to illustrate how you can help to provide good food for 12-18 year olds. With each photo there is information about portion sizes for this age group, as well as recipes for most of the dishes shown in the photos. The CD-ROM also contains a PDF of this book.

Also available:

Eating Well for 12-18 Year Olds: Food Photo Cards: A set of printed A5 food photo cards is also available. This includes full-colour photos of breakfasts, meals, snacks and desserts for 12-18 year olds, with suggested portion sizes and recipes. These photo cards are printed versions of the materials provided on the CD-ROM above.

For more information on eating well for children and young people

The Caroline Walker Trust (CWT) has produced a report which provides explanation and evidence for the recommendations we make in this photo resource about eating well for children and young people. *Eating Well at School* provides evidence-based and practical advice about how to encourage children and young people to eat well. This can be downloaded from **www.cwt.org.uk**. We strongly advise everyone to look at this report as well as using the information in this photo resource.

Eating well for 12-18 year olds

Principles of eating well

Eating well is fundamental to good health and well-being, but it should also be an enjoyable social experience. Eating and drinking well is essential for proper growth and development, but also for developing a love of good food and the development of social skills. Acquiring healthy eating and drinking patterns as a teenager can promote good health and well-being in later life. The focus of eating well for young people should always be on the range of interesting and tasty food that can make up a healthy diet, rather than a focus on denying them certain foods and drinks.

Young people need a good appetite to eat well

In order for young people to eat well they need to be hungry at mealtimes, and the best way to ensure young people are hungry is for them to be active. It is important to encourage young people to be active throughout the day, with all teenagers doing a minimum of 60 minutes' moderately strenuous activity a day (the sort of activity that makes your heart rate increase and makes you breathless). Advice on how to increase activity can be found at www.nhs.uk/change4life.

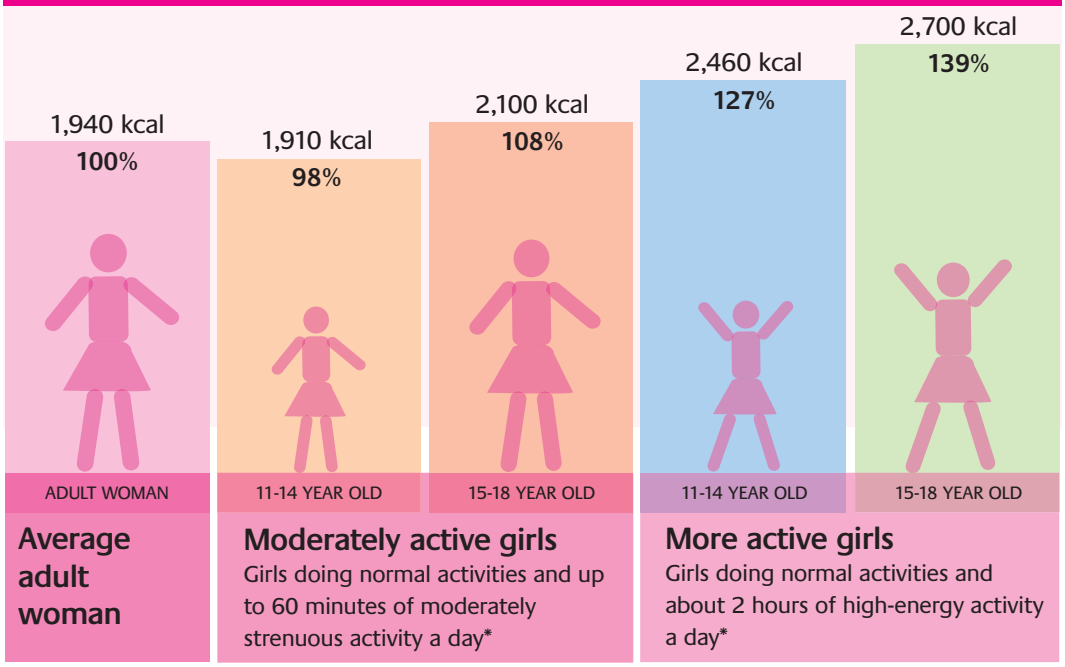
Young people are still growing

Young people need energy (calories) to maintain their body functions and to be active – just as adults do. But they also need energy for growth – giving them relatively high energy needs for their size. Most young people are still growing throughout their teenage years, and although most girls will have reached the end of adolescence by the age of 16-17, and boys by the age of about 18, some young people will still be growing into their early 20s. The diagrams on the next page show the amount of energy needed by typical teenagers at different ages, compared with the amount needed by an average adult man or woman. More active young people will have greater energy needs: girls who are very active (doing 2 hours or more of high-energy activity a day) will need more energy than most adult women typically do, and boys who are very active will need considerably more than typical adult males.

How much energy (calories) do young people need?

The diagrams below show the average daily energy (calorie) needs of girls and boys aged 11-18 years. They also show what those energy needs are as a percentage of the energy needs of an average adult woman or man. For example, an active 11-14 year old girl needs 127% of the energy needs of an average adult woman.

Average daily energy (calorie) needs: GIRLS aged 11-18 years



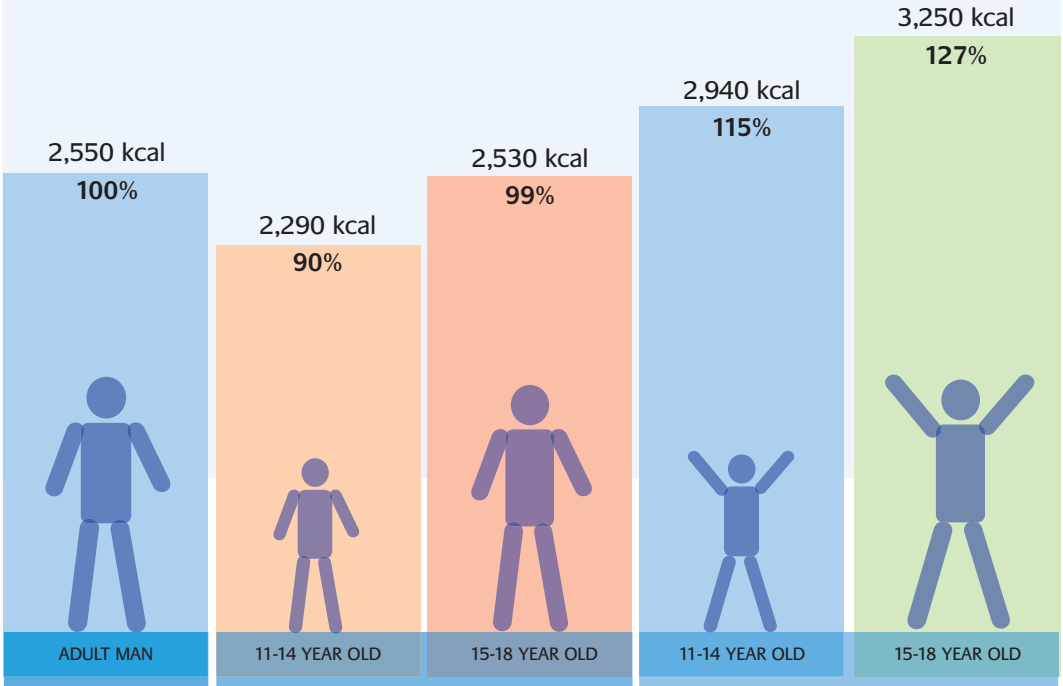
Average adult woman

Moderately active girls
Girls doing normal activities and up to 60 minutes of moderately strenuous activity a day*

More active girls
Girls doing normal activities and about 2 hours of high-energy activity a day*

The percentage figures indicate the energy (calorie) needs as a percentage of the energy needs of an average adult woman.

Average daily energy (calorie) needs: BOYS aged 11-18 years



Average adult man

Moderately active boys
Boys doing normal activities and up to 60 minutes of moderately strenuous activity a day*

More active boys
Boys doing normal activities and about 2 hours of high-energy activity a day*

The percentage figures indicate the energy (calorie) needs as a percentage of the energy needs of an average adult man.

* See page 86 for an explanation of how we have estimated energy needs.

So if young people need lots of energy (calories) – why are they getting fatter?

There is evidence that many young people in the UK are getting too heavy for their age and height, and that this is happening for the same reasons that adults are getting fatter: they are eating and drinking too many calories every day and are not using up enough of these calories being active. If you take in more calories every day than you use up, over time you will lay down the excess energy as fat. It is usually having a little bit too much extra energy over time which, little by little, adds to up to people being overweight. People who gain weight do not necessarily eat huge amounts of food and calories every day. Having even a little bit too much every day swings the balance from weight maintenance to weight gain.

Look at the different eating patterns for two 13 year old boys and two 17 year old girls shown on the next two pages, to see how nutritional needs can be met, or not met, when young people eat in different ways.

EXAMPLE 1 Moderately active 13 year old boys
Average daily energy (calorie) needs = 2,220kcal

Anil, 13

Breakfast
Blueberries (80g)
Pancakes (60g)
Orange juice (150ml)

School snack
Banana (150g)

School lunch
Hamburgers (90g)
Potato wedges (150g)
Broccoli and carrots (80g)
Apple crumble (100g)
Custard (100g)
Glass of water (150ml)

After school
Banana bread (75g)
Chocolate milk (150ml)

Tea
Vegetable risotto (200g)
Mixed salad (80g)
Baguette (65g)
Twin pot of yoghurt (150g)

Energy intake from the food and drinks listed above 2,220kcal

Nutrient requirements met (✓) or not met (✗):

Fibre	✓
Protein	✓
Iron	✓
Zinc	✓
Calcium	✓
Vitamin A	✓
Vitamin C	✓
Folate	✓

The foods listed above would also provide appropriate amounts of saturated fat, sugar and salt, and include more than 5 portions of fruit and vegetables.

For other examples of good meals and snacks, see the food photos on the CD-ROM included with this book.

Paul, 13

Breakfast
White toast and chocolate spread (100g)
Fruit juice drink (200ml)

School snack
Banana (150g)

Lunch eaten outside school
Fried chicken and chips meal (240g) with ketchup (12g)
Can of cola drink (330ml)

After school
Crisps (30g)
Carton of fruit drink (200ml)

Tea
Pepperoni pizza (120g)
Mixed salad (80g)
Garlic and cheese bread (65g)
Strawberry mousse dessert (80g)
Glass of water (150ml)

This is about 400kcal more than is needed for activity and normal body functions.

Energy intake from the food and drinks listed above 2,600kcal

Nutrient requirements met (✓) or not met (✗):

Fibre	✗	Only about 80% of requirements met
Protein	✓	
Iron	✗	Only about 65% of requirements met
Zinc	✗	Only about 65% of requirements met
Calcium	✗	Only about 70% of requirements met
Vitamin A	✗	Only about 85% of requirements met
Vitamin C	✓	
Folate	✗	Only about 75% of requirements met

Also, this type of eating pattern:

- provides too much **saturated fat** (180% of dietary reference value)
- provides too much of the sort of **sugars** that damage teeth (200% of the dietary reference value)
- provides too much **salt** (120% of average recommended amount), and
- provides only 2 out of the recommended 5 portions of **fruit and vegetables**.

EXAMPLE 2 Moderately active 17 year old girls
Average daily energy (calorie) needs = 2,110kcal

Kelly, 17

Breakfast
Muesli with natural yoghurt and banana (250g)
Fresh orange juice (150ml)

School snack
Apple (80g)

School lunch
Salmon pasta salad (260g)
Wholemeal roll (60g)
Fruit jelly (200g)
Glass of water (150ml)

After school
Gingerbread (80g)
Tea with milk (200ml)

Tea
Lamb burger (85g)
Jacket potato with butter (250g)
Bean salad (80g)
Chocolate fudge pudding (85g)
Glass of water (150ml)

Evening
Fruit platter (150g)

Energy intake from the food and drinks listed above 2,110kcal

Nutrient requirements met (✓) or not met (✗):

Fibre	✓	
Protein	✓	
Iron	✓	
Zinc	✓	
Calcium	✓	
Vitamin A	✓	
Vitamin C	✓	
Folate	✓	

The foods listed above would also provide appropriate amounts of saturated fat, sugar and salt, and include more than 5 portions of fruit and vegetables.

Laura, 17

Breakfast
Toast and jam (100g)
Apple juice (150ml)

School snack
Apple (80g)

Packed lunch
Sausage roll (100g)
Coleslaw (45g)
Chocolate chip muffin (85g)
Glass of water (150ml)

After school
Tea with milk (200ml)
Digestive biscuits (26g)

Tea
Burger in a bap (190g) with ketchup (12g) and fried onions (25g)
French fries (65g)
Low-fat yoghurt (125g)
Glass of water (150ml)

Evening
Bag of crisps (30g)
Glass of fruit juice drink (200ml)

Energy intake from the food and drinks listed above 2,360kcal

This is about 250kcal more than is needed for activity and normal body functions.

Nutrient requirements met (✓) or not met (✗):

Fibre	✗	Only about 78% of requirements met
Protein	✓	
Iron	✗	Only about 75% of requirements met
Zinc	✗	Only about 75% of requirements met
Calcium	✓	
Vitamin A	✗	Only about 55% of requirements met
Vitamin C	✓	
Folate	✗	Only about 90% of requirements met

Also, this type of eating pattern:
- provides too much **saturated fat** (160% of dietary reference value)
- provides too much of the sort of **sugars** that damage teeth (150% of the dietary reference value)
- provides too much **salt** (150% of average recommended amount), and
- provides only 2 out of the recommended 5 portions of **fruit and vegetables**.

Why soft drinks are frequently linked to having too many calories

If a young person has 500ml of soft drink during each day – for example, half a large bottle, or two large glasses or 1½ cans of squash or fizzy drinks – they are likely to drink this without changing what they eat. This is because, after having a sweet drink, the person does not always feel as if he or she has eaten calories and it might not reduce their appetite for other meals and snacks. In one week those drinks alone will provide about an extra 1,700kcal – which is almost an extra day's worth of energy – but without any other useful nutrients. In the UK, over 80% of young people have soft drinks regularly and most of them drink the equivalent of at least one can a day. Soft drinks contain mostly water, sugar and flavourings and the high profit margins that they generate for manufacturers means that a considerable amount of advertising and promotion of these drinks is aimed at young people. As well as the energy (calorie) contribution that soft drinks make to teenage diets, sugary drinks in regular contact with the teeth are likely to contribute to tooth decay.

What about choosing diet drinks or low-sugar drinks?

Diet or low-sugar soft drinks are regularly consumed by about 60% of teenagers in the UK and many teenagers appear to drink both sugary and artificially sweetened drinks. Although the sugar and energy content of diet and low-sugar drinks is reduced, any fruit-based or fizzy drink can erode the surface of the teeth if consumed regularly, so these drinks are still not recommended between meals. Also, some evidence suggests that drinking low-calorie soft drinks is also related to weight gain. This might be because these drinks encourage a sweet tooth and a desire for other sweet foods, or they may lead to additional calories being eaten because the drinks don't satisfy hunger. Or, it may simply be because soft drinks are often sold with other energy-dense snacks such as crisps and confectionery.

Reducing the intake of soft drinks among young people

You may be able to support young people to cut down on soft drink consumption by:

- keeping fresh, chilled tap water in easily accessible bottles in the fridge
- reducing the availability and quantity of soft drinks on offer in home environments, and offering other drinks such as smoothies, milk-based drinks or fresh fruit juices.

85% of boys and 81% of girls regularly drink sweetened soft drinks. Boys have an average intake of 380ml a day, and girls 230ml a day.

An average teenage boy in the UK drinks about 138 litres of sweetened soft drink a year – contributing over 60,000 empty calories!

How to help young people to eat well

Eating a wide variety of foods will help to ensure that young people consume adequate amounts of all nutrients. The Food Standards Agency has devised the ***Eatwell plate*** to make it easier to understand healthy eating. Foods are divided into five food groups:

- Bread, rice, potatoes, pasta and other starchy foods
- Fruit and vegetables
- Milk and dairy foods
- Meat, fish, eggs, beans and other non-dairy sources of protein
- Foods and drinks high in fat and/or sugar.

The plate is a visual aid which encourages you to choose a wide variety of different foods from the first four groups every day. Foods in the fifth group – foods and drinks high in fat and/or sugar – are not essential to a healthy diet and should be eaten in small amounts.

Eating throughout the day

Although it is easier for young people to get all the energy and nutrients they need by eating regular meals and nutritious snacks throughout the day, it is also common for teenagers to move away from traditional meals. Frequent snacking and more unusual eating patterns are a common feature of the teenage years, and it is important to remember that young people can still be supported to get all the energy and nutrients they need even if they eat differently from the rest of the family or the people they live with.

This food photo resource has been designed to show how you can create a variety of meal patterns and food choices and still meet young people's energy and nutritional needs. While some teenagers may prefer to graze and eat small meals more often, others may prefer to eat a large meal with extra carbohydrates to fill them up in one sitting. If young people eat a variety of foods from the examples we give in this resource over a period of time, they are likely to get all the nutrients that they need.

Make time for breakfast

Young people who miss breakfast may become hungry and tired in the morning if they have not had their energy needs met at breakfast time, and this may affect their concentration and performance at school or in other tasks. Most breakfast cereals are a good source of energy and fibre and are generally fortified with vitamins and minerals including iron. Breakfast cereals like puffed wheat, crisped rice, cornflakes and malted wheat are good breakfast choices, but avoid brands that are high in sugar and salt. The ***Check the label*** guide on the next page shows how to check labels to see if foods are high in sugar or salt. (See also page 23 for more about food labels.)

It is a good idea to offer a glass of 100% fruit juice with breakfast. Fruit juice is a good source of vitamin C, and vitamin C may help the body to absorb iron from cereal foods. For practical examples of nutritious breakfasts, see the breakfasts on page 36, and the food photos of breakfasts on the CD-ROM included with this book.

Check the label

Use this information to find out if a product is high or low in sugars, fats and salt. Compare these figures with the 'per 100g' figures on the food label.

All measures per 100g	Low	High
Sugars	5g or less	More than 15g
Fat	3g or less	More than 20g
Saturated fat	1.5g or less	More than 5g
Salt	0.3g or less	More than 1.5g
Sodium	0.1g or less	More than 0.6g

Snacks

If young people are grazers and eat snacks across the day, make sure they have access to a good variety of foods so they can create quick and easy snacks. Encouraging young people to make their own snacks and to compare the cost of these with foods they buy out is an important part of their skills development on their way to independence.

Ideas for snacks

- Any type of bread (use a variety of white, brown, wholemeal, granary or crusty breads, including toast); crumpets, English muffins, bagels, pitta bread or sandwiches. Look for lower-salt (low-sodium) versions where available. Suitable fillings for sandwiches might be meat (for example, cold roast meats, chicken, ham, corned beef, meat paste), cheese, cottage cheese, fish paste, mashed pilchards or sardines, tuna, egg, houmous, roast vegetables, banana, salad or combinations of these.
- Dairy foods such as cheese or plain yoghurt with added fruit.
- Fresh fruit such as pears, apple slices, satsumas, banana, seedless grapes, slices of melon, mango, pineapple, kiwi, plums, or berries such as strawberries and raspberries. The fruit from canned fruit in juice can be added to yoghurt or fromage frais.
- Raw vegetables such as peeled carrots, sweet pepper, tomato, cucumber or celery, with dips such as houmous or Greek yoghurt with chives.
- Home-made plain popcorn.
- Plain biscuits such as crispbreads, oatcakes, breadsticks, cream crackers, matzos, rice waffles or melba toast.
- Dairy foods such as plain yoghurt with added fruit.

Drinks

If young people are thirsty, the best drink to offer is **tap water**. Tap water can be chilled in the fridge if cold drinks are enjoyed and it is a good idea to fill containers with water every day so that a drink is always available. Tap water is the most sustainable and the cheapest drink option for all and there is nothing mean about encouraging everyone to drink water.

100% fruit juice can be a good source of vitamin C, but it is also high in sugar, so it should be served with meals rather than with snacks.

Semi-skimmed and skimmed **milks** are a good source of calcium, and teenagers have high calcium needs to support the rapid bone growth many experience during adolescence. Both semi-skimmed and skimmed milks can be used on cereals, in dishes and as drinks between meals, as milk will not damage the teeth. If teenagers have high energy needs, are growing rapidly, are underweight or very hungry, whole (full-fat) milk can provide extra calories. If other milks such as soya milk are drunk instead of cow's milk, make sure that calcium-fortified soya milk is used.

Some teenagers may start to enjoy **tea and coffee** as drinks between meals. If these are enjoyed, encourage them to have these drinks without added sugar and preferably not to drink them with meals, as the tannins in them can impact on the absorption of some minerals. High intakes of caffeinated beverages (including energy drinks, cola drinks, stimulant drinks or regular very strong coffees) are not encouraged for teenagers as they may find it harder to sleep well or concentrate if caffeine intakes are high.

Other drinks – such as squash, fizzy drinks, fruit-flavoured drinks, energy drinks and other sweetened or fruit-flavoured soft drinks – regardless of whether they contain sugar or not – can damage teeth, either through encouraging decay or eroding the teeth, or both. If they are served, they are less damaging if served with meals where the foods eaten contain fibre and other components to stop sugars adhering to the teeth. Using a straw can also help to prevent sugars and acids from being in contact with as many teeth. Soft drinks consumed before bed or in the middle of the night are most damaging, so make sure that young people clean their teeth before bed and don't have squash, juice or any drink other than water by their bed.

Eat more vegetables

Almost everyone would benefit from eating more vegetables every day. There is excellent evidence that eating more vegetables is associated with better health throughout people's lives.

Young people should aim to have at least three different types of vegetable or salads every day at portions of 80g or more. A wide variety of fresh, dried, canned and frozen vegetables can be included in the diet. Examples of vegetable portion sizes are shown on pages 65-74.

Young people may not be used to eating lots of vegetables – but there is lots of evidence that they like and enjoy these foods when they get used to having them. It helps if:

- vegetables are offered frequently and are available either raw or cooked in a way that is enjoyed and makes them look appealing, and
- adults who eat with young people are seen to enjoy a variety of vegetables and salads themselves.

Young people should have at least 5 portions of a variety of fruit and vegetables every day.

Eat more fruit

All young people should have at least two portions of different types of fruit a day. The fruit can be fresh, canned or dried fruit. Up to one of the two portions a day can be a glass of fruit juice. Examples of fruit portions are shown on pages 57-64.

For more information on eating more fruit and vegetables, visit www.5aday.nhs.uk

People who say they don't like vegetables may be more willing to try:	People who say they don't like fruit may be more willing to try:
• sweetcorn or baby corncobs • raw carrot sticks, slices of red and yellow peppers, or cherry tomatoes • tomato sauce on pasta • 'bubble and squeak' (green cabbage and mashed potato mixed together) • stir-fry vegetables • vegetable soup • vegetable curry • grated carrot in salads.	• canned or fresh pineapple, peaches or fruit salad • fruit smoothies (fruit liquidised together with other fruit, natural low-fat yoghurt or fruit juice), or fresh fruit milkshakes made with skimmed milk and fruit • raisins or other dried fruit such as dates, apricots, pear or mango • banana with ice cream or custard • fresh fruit jellies or home-made lollies • fruit kebabs • frozen bananas.

Eating more locally grown fruits and vegetables

We are able to grow a wide range of fruits and vegetables in the UK and it is better for the environment, and the economy, if we all try and eat foods that do not have to travel long distances. Also, it is better for the environment if fruits and vegetables are grown without the need for artificial heat, or for lots of added chemicals. Think about whether you can join a local box scheme which sources organic fruit and vegetables. These are often no more expensive than buying fruit and vegetables in supermarkets and will help to support your local community. Organic fruits and vegetables do not contain more nutrients than conventionally grown ones, but farmers who grow food organically make an important contribution to protecting wildlife and keeping the land and soil healthy.

Eat more potatoes

Potatoes are an excellent source of nutrients and fibre, as well as being a starchy, 'energy-giving' food. Potatoes grow well in the UK and can often be sourced locally. Potatoes are really versatile as an ingredient, are very good value for money and are easy to cook. Jacket potatoes with fillings such as mashed tuna fish or baked beans or low-fat soft cheese, and served with a salad or hot vegetable, can be a very quick, easy and nutritious meal for young people and one they can prepare for themselves.

Ideas for fillings for baked potato

Bacon and sweetcorn
Bacon, cherry tomatoes and parsley
Baked beans
Baked beans with a few drops of chilli sauce
Cheddar cheese and chopped sunblushed tomatoes
Chicken and broccoli
Chilli con carne
Cottage cheese with chopped pineapple
Cottage cheese with onion and chives
Grated cheese and tomato
Ham and chopped pineapple
Houmous and low-fat soft cheese
Low-fat soft cheese
Mashed tuna
Mashed tuna, grated carrot and chopped cherry tomatoes
Mozzarella, chopped tomato and basil
Plain yoghurt mixed with coriander, chopped cucumber and spring onion
Roasted peppers
Scrambled egg with chopped tomatoes and red pepper
Tomato salsa
Tuna and sweetcorn mayonnaise

Salt

Salt (sodium chloride) is essential in the diet to maintain fluid balance. Having too much salt in the diet can raise blood pressure which can contribute to stroke and coronary heart disease in later life.

Foods that have a lot of salt

Most of the salt we eat is in ready-made foods. The list below gives some examples of ready-made foods that have a lot of salt.

- Soups
- Bottled pasta sauces and other cooking sauces
- Sauces, spreads, pickles, chutneys and soy sauce
- Mayonnaise and salad cream
- Savoury ready meals
- Savoury snacks such as crisps, salted nuts, papadums and savoury biscuits
- Bread, rolls, garlic bread and flavoured breads
- Some breakfast cereals
- Meat pies and pasties, and canned meat products
- Some sweet foods such as buns, pastries and hot chocolate powder
- Smoked foods and smoked meats such as ham and bacon
- Fast food or take-aways such as pizza, burgers and Chinese and Indian take-away meals.

Current nutritional guidelines suggest that everyone aged 11 years and over should have no more than 6g salt a day.

It is easier to reduce the amount of salt if food is prepared from ingredients rather than buying ready-prepared foods. The menu plans on page 40 and the food photos on the CD-ROM included with this book give ideas for meals and snacks that provide lots of nutrients without lots of salt. For information on how to check if a packaged food is low in salt, see ***Check the label*** on page 16. There is also lots of advice on reducing salt in the diet on www.salt.gov.uk.

How to add flavour to your cooking without using salt

- Cut down on the salt you add when cooking potatoes, pasta and rice. After a while you'll find you don't need to add any at all.
- Add fresh herbs to pasta dishes, vegetables and meat.
- Use tomato purée or balsamic vinegar as flavourings.
- Marinade meat and fish in advance to give them more flavour.
- Use garlic, ginger, chilli and lime in stir-fries.
- Make your own stock and gravy, instead of using cubes or granules. Or use low-salt bouillon.
- Roast vegetables such as red peppers, courgettes, fennel, squash and parsnips, to bring out their flavour.
- Squeeze lemon or lime juice onto fish and into casseroles and stews.
- Try using different types of onion – brown, red, white, spring onions or shallots.
- Make sauces using ripe, flavoursome tomatoes and garlic.
- Use black pepper instead of salt, to season foods like pasta or scrambled egg.
- Buy good-quality fresh ingredients as they will have more natural flavour.
- Add fruit to meat dishes to give a naturally sweet flavour – for example, pork and apricots.
- When making cheese dishes, use a small amount of strong cheese rather than a larger amount of milder cheese. Add a little mustard powder to bring out the cheese flavour.

Sugars

Sugar is not just the white crystals we put in tea and coffee. There are two types of sugar.

- One type of sugar is found naturally in some foods such as vegetables, fruit and milk. This type of sugar is not harmful to our teeth.
- The other type of sugar is the sugar that is taken out of sugar beet or sugar cane, or out of fruit, and then put back, as sugar, into other foods and drinks. This type of sugar damages teeth. Also, many of the foods and drinks with this type of sugar tend to have lots of calories (which can contribute to overweight), but they have few other nutrients.

We don't need to add sugar to our food, or have sugary foods or drinks, as most of us can get all the energy (calories) we need from starchy foods such as potatoes, rice, beans or pasta. Our bodies break these foods down into glucose, which the body then uses to give us a steady supply of energy.

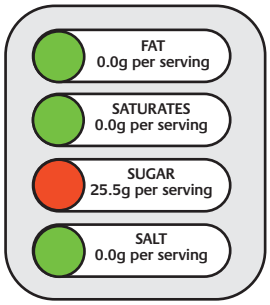
If someone's diet has a lot of sugar in it, they are more likely to become overweight or to have tooth decay. Most young people in the UK eat too much sugar. It can be hard to avoid having lots of sugar as it is put into many common foods. See the box below.

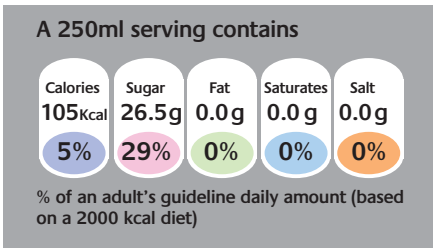
Foods and drinks that have a lot of sugar

FOODS	DRINKS
Biscuits	Soft drinks
Cereal bars and flapjacks	Squashes
Cakes	Fizzy drinks
Pastries	Energy drinks
Fruit pies and pie fillings	Some smoothies and fruit juice drinks
Puddings such as sponge puddings, cheesecake, mousse or tarts	Milkshakes
Sweetened breakfast cereals	Some sweet alcoholic drinks such as sweet wine, drinks with mixers, or bottled cocktails and shots
Sweetened yoghurts and fromage frais	
Ice cream	
Sweets	

How to cut down on sugar

Some foods have traffic-light labels like the one on the left, below. Avoid any foods and drinks which have a red traffic light for sugar.





Some foods and drinks have a food label something like the one on the right, above, which tells you what percentage of a person's daily recommended maximum sugar intake that a portion of the food or drink contains. If a product has this sort of label, think about how much of it you might eat or drink. Avoid anything that will give you more than 10% of the recommended maximum intake of sugar in one food. For example:

- If a carton of drink says it contains 29% of your daily sugar intake, that is a lot.
- If a bar of chocolate says that 1 square will give you 5% of your daily sugar intake, and you think you might eat three of the 20 squares in the bar, that would be 15% of your daily sugar and that is a lot.

If the food doesn't have either of these two sorts of labels, you can usually find information about how much sugar there is, either in a portion or in 100g of the food, by looking at the ***Nutrition information*** on the pack. (See ***Check the label*** on page 16.) But it's not always easy to tell whether the sugar in the food is the type that can damage teeth. As a general rule, if a food says it has 15g of sugar or more per 100g, it is probably high in sugars that can damage teeth.

Some ways of cutting down on sugar

- Have fewer sugary drinks and foods. Try to have them only at mealtimes.
- Try unsweetened fruit juice mixed with fizzy water at mealtimes.
- If young people have sugar in tea or coffee, try to cut down on how much they have, until they don't have any at all.
- Instead of biscuits and cakes, try currant buns, scones, malt loaf or fruit bread.
- Add dried fruit or fruit purée to dishes to sweeten them, instead of adding sugar.
- Choose wholegrain breakfast cereals instead of cereals that are coated in honey or sugar.
- Add your own flavouring – such as chopped-up fruit, or a little honey – to natural yoghurt, instead of buying flavoured yoghurt which is often very sweet.
- Where you can, make your own food. Processed foods such as dried soups, sauces, dried rice dishes, ready meals, ready-made desserts and packaged cakes and biscuits often have much more sugar in them than you would use in a recipe yourself. And many of these dishes are simple and cheap to prepare.

Looking after our bones

Young people need to make sure they build strong bones when they are young so that they will have strong bones in later life. During adolescence bone growth is considerable, particularly for boys. There are two nutrients that are very important for healthy bones: vitamin D and calcium.

Vitamin D

Most people make vitamin D in their skin when it is exposed to summer sunlight. (The UV rays are strong enough to do this in most parts of the UK between April and September.) Although young people who regularly go outside with some of their skin exposed* should be able to make enough vitamin D for a whole year, some young people may be at risk of vitamin D insufficiency:

- Young people with darker skins will need more exposure to summer sunlight, as black skin makes vitamin D more slowly than white skin.
- If young people wear concealing clothing when they are outside – for example, if they never have their shoulders or arms exposed to the sun – they may not be able to make enough vitamin D.
- Young people who rarely go outside may not make enough vitamin D. They may not go outside because they are unable to do so because of a disability, because they are in a residential setting or because they choose to stay inside (for example, playing computer games for long periods).
- Young people who do not eat meat or fish may have less dietary vitamin D. Although dietary vitamin D alone does not prevent vitamin D insufficiency, it can provide a useful additional source.

If there is any concern about a young person's ability to make enough vitamin D, their parent or carer should talk to their GP as the young person may need a dietary supplement. Anyone who has little access to sunlight (for example, because they have a disability or illness that makes it difficult for them to spend much time outside or because they are in a young offenders' institution) should always be considered for a vitamin D supplement. It is also important that any teenage girl who may become pregnant has good vitamin D status, as there is evidence that low vitamin D status in pregnancy can impact on the bone health of her child.

There is some vitamin D in a few foods, but it is unlikely that most people can get enough vitamin D from their diet alone.

* Current Sun Smart guidance suggests that people should spend some time in the shade between 11am and 3pm when the sun is at its strongest and everyone should take care not to burn their skin. People with fairer skin are likely to need greater protection from the sun than people with darker skin, but all skin types can burn.

Calcium

It is also important to get adequate amounts of calcium from the diet. Calcium is important for growing bones. It has been shown that milk drinking may be beneficial in helping prevent bone problems in older age. Milk, cheese, yoghurt and fromage frais are the best sources of calcium, but other foods also contain some calcium (see page 83).

To make sure bones are strong

- Activity is key – weight-bearing exercise (such as climbing stairs running, football or netball) every day helps develop strong bones.
- Make sure everyone spends plenty of time outside in the summer months with some of their skin exposed (for example, their hands, face and shoulders).
- Make sure young people get adequate amounts of calcium.
- Being underweight is detrimental to bone health, and teenage girls who avoid eating in order to maintain a slim body shape need to be aware that being thinner than recommended, having too little calcium, and taking little exercise (along with smoking) will put them at risk of bone problems when they are older.
- Young people who drink large amounts of fizzy drinks, particularly cola drinks, may also be more prone to bone problems, since the phosphorus in these drinks makes it harder for the body to absorb calcium.

Iron

There is considerable evidence that not getting enough iron in the diet has serious health consequences. It is a particular problem among teenage girls and pregnant women. Iron is needed for healthy blood, but low levels of iron are also associated with poor appetite, increased risk of infection and lower levels of activity and attainment. Adolescent boys and girls both need additional dietary iron when they are growing. Boys usually get enough from the diet. Girls, however, need extra iron to replace menstrual losses and it can be difficult for some girls to get all the iron they need from food alone. Girls most likely to be at risk are those who are underweight, dieting, have become vegetarians during their teenage years, have a restricted diet or who have high blood losses.

If you are concerned that someone is iron deficient – for example, if they look pale and are feeling tired and a bit miserable and have maybe had a lot of infections recently – ask their parent or carer to ask their GP for a blood test.

For information on which foods are good sources of iron, see page 83.

Zinc

Zinc is important for all sorts of body functions and is also known to play an important role in the immune system (protecting us from illness and infection), and in growth and development. Studies have shown that some young people have too little zinc in the diet.

Good sources of zinc include meat, fish such as tuna, sardines and pilchards, wholegrain cereals, peas, beans and lentils and eggs. For information on other foods which are good sources of zinc, see page 84.

Pregnancy

There are some important nutritional messages associated with pregnancy at any age and, if teenage girls may become pregnant, it is important that they are eating a good and varied diet. There are significant nutritional implications for a teenage mother and her child as some young women may still be growing themselves.

- Women who are planning a pregnancy or who may become pregnant should have sufficient folic acid (also called folate). Good sources of folic acid can be found on page 82. As soon as someone finds out they are pregnant, they should take folic acid supplements if they are not already doing so. For all young people under 18 years of age these supplements are provided free as Healthy Start vitamins. (See www.healthystart.nhs.uk or ask a health visitor.)
- Women who are pregnant should take a vitamin D supplement.
- Women who are planning a pregnancy, who may become pregnant or who are pregnant should avoid high intakes of alcohol as this can damage the developing baby and cause a whole range of health difficulties in later life.
- There is also some additional dietary advice for pregnant women around other foods and drinks to avoid or to have in only moderate amounts and this can be found on www.eatwell.gov.uk.

Breastfeeding advice

Throughout pregnancy and especially in the days after the birth young mothers should be given support, advice and information about how to successfully breastfeed their baby. They should be strongly encouraged to breastfeed as this protects both their own health and that of their baby.

Vegetarian diets

A vegetarian diet can provide all the nutrients needed for good health. However, it is important not to assume that all vegetarian diets are healthy, as some people may remove meat from their diet without consuming suitable alternatives. It is harder to consume sufficient iron and zinc if a good variety of foods is not eaten.

The body absorbs **iron** more easily from animal sources – such as meat – than from non-animal sources such as cereals or vegetables. This means that vegetarians have to take extra care to make sure that they get enough iron. There is some evidence that vegetarian women in particular have low levels of iron. For foods that are good sources of iron, see page 83.

Zinc intakes may also be lower among vegetarians. Eating a good variety of foods ensures that vegetarians have adequate zinc intakes. Sources of zinc include fortified breakfast cereals, tofu, nuts, peas, beans and lentils, sesame seeds, milk and cheese.

There is a wide range of vegetarian alternatives to meat foods available these days (vegetarian sausages, burgers, pies, cold 'meats' etc.) and these can sometimes be useful as part of a varied diet. However, don't rely on these foods as many are high in salt and may be high in fat, and it is important to use as many real foods as possible in a healthy diet rather than relying on processed alternatives.

Advice on vegetarian diets can be obtained from the Vegetarian Society (see page 87).

Vegan diets

Vegans generally adopt a diet free of all animal products and will not eat milk, cheese, yoghurt or eggs as well as avoiding meat and fish. It is possible to eat well as a vegan, but care has to be taken and people should always seek advice on how to ensure that they get all the nutrients they need. Vegans need to ensure that they include sources of vitamin B_{12} and riboflavin (see page 82) in their diet. Advice on vegan diets can be obtained from the Vegan Society (see page 87).

Support school meals

Most of the UK has statutory standards for school food, which means that schools and school caterers aim to provide meals which meet the nutritional needs of young people. Supporting your school by having school meals is important, as this will ensure that the service can provide the best meals possible to all, and encourages young people to eat together and enjoy the important social aspects of mealtimes. It is very difficult to offer a good nutritious packed lunch every day that is as varied and cost-effective as a school lunch. For more information about school meals in England see www.schoolfoodtrust.org.uk.

Packed lunches

Young people may take a packed lunch when they go to school, college or work, or go on an outing. It is important that a packed lunch provides the same variety of foods and nutrients as the meal it might be replacing. A packed lunch should contain:

- A starchy food. For example, any sort of bread, pitta bread, chapatti, crispbreads, rice cakes, or wraps. Choose lower-salt breads where available.
- A meat, fish or alternative. Alternatives include, for example, egg, cheese, peanut butter, or houmous.
- One portion of vegetables. For example, raw vegetables or salad.
- One portion of fresh or dried fruit or fresh fruit juice.
- A drink. Water, milk or fresh fruit juice are good choices.

Additional snacks such as plain popcorn, breadsticks, unsalted nuts, pumpkin or sunflower seeds, rice crackers or pretzels can be added for hungrier or more active teenagers, and a yoghurt or fromage frais provides a good source of calcium. For people who have higher energy needs, some more energy-dense foods may also be appropriate. See page 16 for more ideas for snack foods.

Eating out and take-aways

Eating out and having take-aways are an important part of lifestyle for many people and offer the opportunity to socialise, meet friends and take a break from food preparation and clearing up. However, habitually eating out and having take-aways is likely to mean that intakes of fat, saturated fat, salt and sugar are much higher than recommended and this is very likely to be the case if fast-food meals are treated as snacks rather than as meals.

For suggestions for healthier eating out and take-away options, see the box below.

Eating out and take-away tips

Indian meals
Good choices: Tandoori chicken or other meat or fish (which is cooked in an oven), chicken or other meat or fish tikka (on a skewer without sauce), dry curries, vegetable curries, dhal, channa dhal, plain boiled rice, chapatti or roti breads.
High-fat foods to avoid: Papadums and other fried foods such as samosas and onion bhajias, creamy or coconut-based sauces (such as korma sauces), fried rices (such as pilau rice), and breads which have a lot of fat added (such as stuffed naan breads).

Chinese meals
Good choices: Stir-fries, chicken, vegetable or prawn chop suey, steamed fish, vegetable dishes, boiled noodles, dishes with steamed tofu.
High-fat foods to avoid: Avoid batter (for example, sweet and sour chicken, battered bananas or apple fritters), spring rolls and prawn crackers. Avoid fried rice dishes and fried noodles.

Pizza
Choose thin-crust pizzas, and pizzas without cheese in the crust. Avoid garlic bread. Avoid having extra cheese, pepperoni or salami. Add more vegetable or fish toppings instead. Encourage eating a salad with the pizza.

Fish and chip shops
Fish is a good choice but batter is high in fat and eating less or no batter could be encouraged. Choose small portions of chips. Mushy peas or baked beans are a good accompaniment. Avoid pies or battered sausage-type products.

Burger bars
Go for standard rather than 'super-size' options. Choose a plain burger in a bun with a salad. Avoid extra cheese or mayonnaise, thick milkshakes, chicken nuggets or other battered dishes such as onion rings. Avoid French fries.

Sandwiches
Look for sandwiches that don't contain mayonnaise. You can usually check the nutritional content of sandwiches on the label, so choose those lower in fat and salt.

Salads
Some ready-prepared salad bowls have a lot of mayonnaise and may be designed for two people. Check the labels for lower-fat single portions.

Young people need food skills for life

To ensure that young people will be able to eat well and provide food for themselves and others they live with and support in the future, all young people should be given basic food skills during the teenage years.

Young people should be aware of:

- the cost of food and where to shop
- how to plan meals and estimate quantities of food needed
- how to prepare and cook basic ingredients and simple meals
- how to clear up and wash up after cooking and eating, and simple food hygiene.

There should be an expectation that all young people should know how to cook for themselves by the time they become independent. If a young person can master the instructions for a mobile phone they are likely to be able to follow a recipe. For more information on how to encourage young people to gain food skills for life, see the Caroline Walker Trust publication ***Eating Well for Looked After Children and Young People***.

It is also likely to be increasingly important that young people are able to make choices about the foods they buy and eat in terms of the environmental impact that they make. Encourage young people to think about where food comes from and to discuss issues such as fair trade, animal welfare, farming and different cultural and religious food choices. Organisations such as Compassion in World Farming, the Food Ethics Council, the Soil Association, Sustain, the Vegetarian Society and the Vegan Society can provide useful information about some of these issues. For their contact details, see page 87.




Sample meals and snacks for 12-18 year olds






This section contains examples of meals and snacks which give an idea of the types of foods, and amounts of foods, that meet the nutritional needs of 12-18 year olds.

A complete list of the example meals and snacks is given on pages 35-37. Photos of all these meals and snacks, and recipes for them, are on the CD-ROM included with this book.

In order to calculate the sorts of foods, and the amounts of foods, that would enable teenagers to meet average energy and nutrient needs, we created a series of 7-day menu plans. The menu plans were put together based on typical omnivorous diets, on vegetarian diets and including options suitable for young people from different religious and ethnic groups. The meals and snacks shown in this resource are taken from those menu plans and, **if a variety of different meals and snacks are eaten over time**, it is likely that the nutrient needs of most young people will be met.

Young people may choose to eat in a variety of patterns across the day – and will have very different needs depending on their age, gender and activity levels. In order to allow this resource to be as flexible as possible, we have divided up the meals and snacks into 'energy portions' – and, from these, young people can select the number appropriate to them. We have made suggestions for 500kcal meals, 250kcal light meals/snacks, 200kcal extras, 250kcal desserts, and 100kcal milky drinks, which can be added together to make up a day's energy needs and which are also likely to meet other nutritional needs. The food photos have been colour-coded as shown below.

500kcal meals

250kcal light meals/snacks

200kcal extras

250kcal desserts

100kcal milky drinks

Fruit portions can be added in as approximately a 50kcal extra.

The meals and snacks in the photos are examples, and there are obviously lots of other foods, meals and recipes which can be included as part of a good diet. We hope that the examples given here help people to know what sort of portion sizes are appropriate, and that the example eating plans on pages 40-48 show how teenagers with different lifestyles can still eat well across the day. (For more ideas for recipes, see the meals and snacks in ***Eating well for 5-11 year olds***. For details see page 88.)

List of food photos – 12-18 year olds

500kcal meals

Meat dishes

Beef burger with green salad, and orange juice
Chilli con carne with rice and green beans, and orange juice
Lamb kebabs with pitta bread, yoghurt and salad, and orange juice
Meatballs in tomato sauce with pasta swirls and salad, and orange juice
Roast beef with gravy, roast potatoes and mixed vegetables, and orange juice
Spaghetti Bolognese with salad, and orange juice
Spicy beef and pepperoni pizza with salad, and orange juice
Spicy beef ciabatta with salad, and orange juice

Chicken dishes

Chicken fajitas with sweetcorn, and orange juice
Chicken piri piri with savoury rice and salad, and orange juice

Fish dishes

Breaded cod with potato wedges and mushy peas, and orange juice
Prawn salad with pitta bread and coleslaw, malt loaf, and orange juice
Salmon couscous with salad and pitta bread, and orange juice
Tuna and sweetcorn sandwich with celery, banana and raisins, and orange juice
Tuna and tomato pasta with salad, and orange juice
Tuna pasta salad with French bread, and orange juice

Vegetarian dishes

Cheese on toast with tomato and carrot sticks, and orange juice
Creole jambalaya with pitta bread and salad, and orange juice
Egg and cress baguette with carrot and pepper sticks, and orange juice
Egg salad with pitta bread and coleslaw, currant bun, and orange juice
Falafel and houmous pitta with carrot sticks, and orange juice
Frittata and new potatoes with roasted vegetables, and orange juice
Macaroni cheese with broccoli and a brown roll, and orange juice
Peanut butter and banana sandwich with apple, and orange juice
Roasted vegetable and mozzarella ciabatta with salad, and orange juice
Tomato and avocado bagel with satsuma, and orange juice
Vegetable couscous and chickpea fritters with salad, and orange juice
Vegetable curry with lentil dhal and rice, and orange juice
Vegetarian burger with salad, and orange juice

250kcal light meals/snacks

Breakfast cereals

Cornflakes with milk, and orange juice

Fruit and fibre cereal with milk, and orange juice

Mini weet bisks with honey and nuts and milk, and orange juice

Muesli with milk, and orange juice

Porridge with jam, and orange juice

Weet bisks with milk, and orange juice

Savoury

Beans on toast

Breadsticks with a mustard dip, and orange juice

Cheese and tomato quesadillas

Crackers with cheese and apple chunks

Cream crackers with liver pâté and cherry tomatoes

Crunchy peanut butter on toast

Eggy bread and beans

Fried egg sandwich with tomatoes

Home-made cheesy garlic bread with grilled tomato

Mexican scrambled egg wrap

Mini fish finger sandwich

Pitta bread crisps with a chilli dip and grapes

Speedy mini pizza

Toasted crumpet with soft cheese and celery and carrot sticks, and orange juice

Tomato and basil soup with a wholemeal roll

Tortilla crisps with a curry dip and apple

Tuna melt

Sweet

Apple rings with crunchy peanut butter

Fresh fruit milkshake and Scotch pancake

Greek yoghurt with strawberries

Hot chocolate with oaty raisin cookie

Milky coffee with digestives

Mixed dried fruit and nuts

Popcorn with a fruit smoothie and orange wedges

Scone with strawberries

200kcal extras

Breads

Chapatti

Garlic bread

Naan bread

Wholemeal roll

Wholemeal toast

Potatoes

Jacket potato

Oven chips

Potato wedges

Mashed potato

Other

Baked beans

Rice

Tortilla chips

250kcal desserts

Baked banana with Greek yoghurt

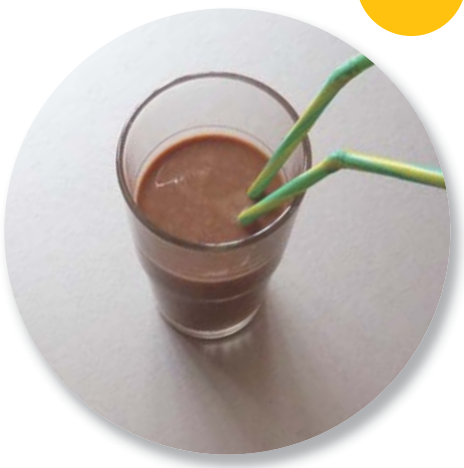
Blackberries and custard

Pancake with Greek yoghurt and banana

Quick microwave sponge pudding and custard

Rice pudding and mandarins

Scone and jam



100kcal milky drinks

Hot chocolate

Milk

Milkshake

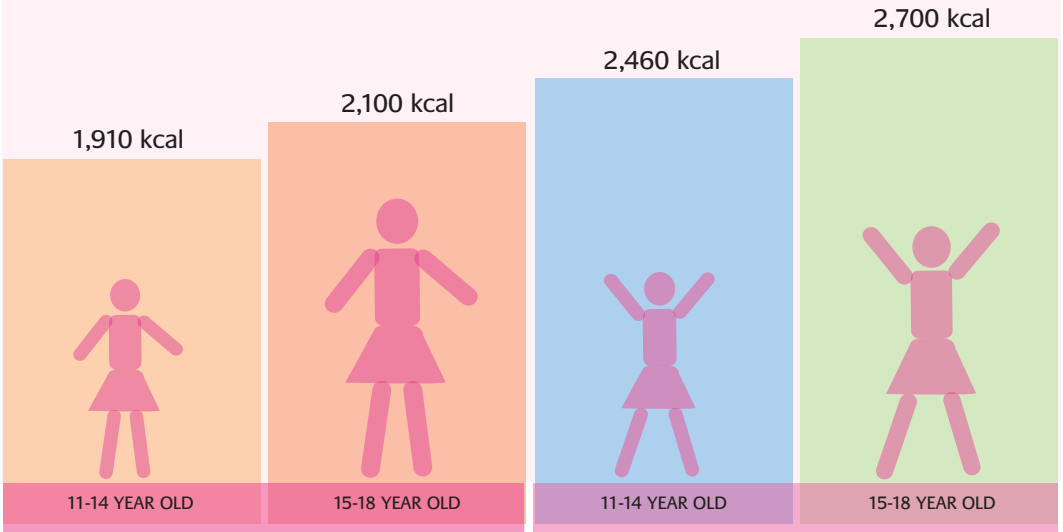
Milky coffee

Smoothie

Examples

Below we give some examples of the varying energy (calorie) needs for teenage boys and girls of different ages and activity levels – and on the next page some examples of how they might meet those needs from different combinations of the example meals and snacks.

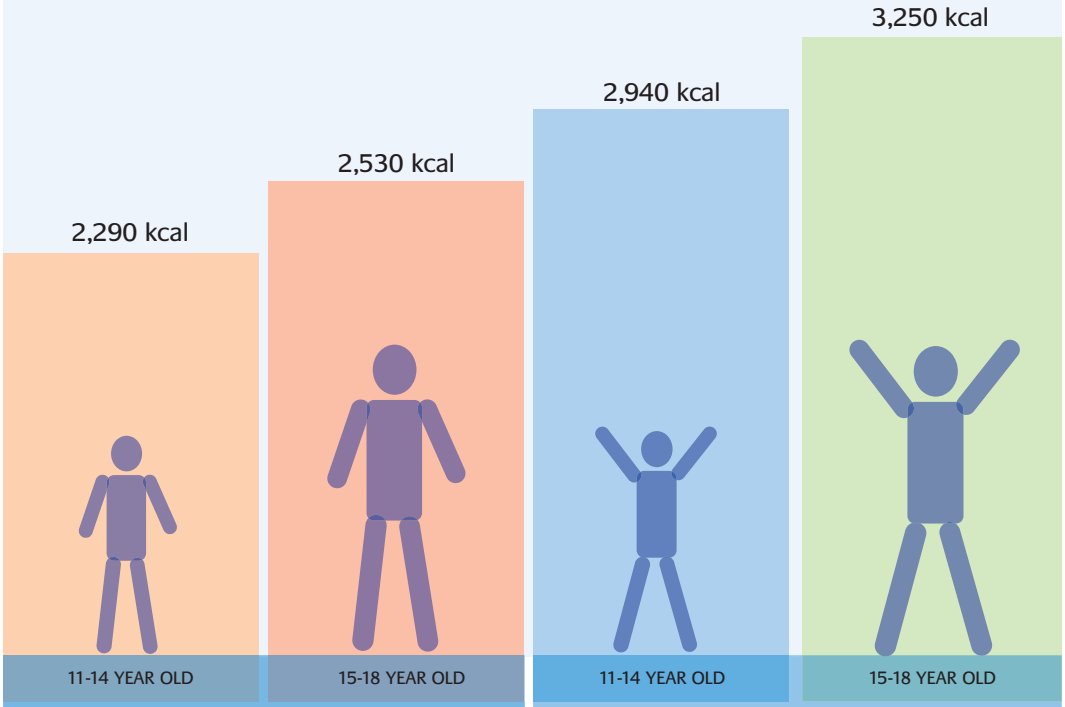
Average daily energy (calorie) needs: GIRLS aged 11-18 years



Moderately active girls
Girls doing normal activities and up to 60 minutes of moderately strenuous activity a day*

More active girls
Girls doing normal activities and about 2 hours of high-energy activity a day*

Average daily energy (calorie) needs: BOYS aged 11-18 years



Moderately active boys
Boys doing normal activities and up to 60 minutes of moderately strenuous activity a day*

More active boys
Boys doing normal activities and about 2 hours of high-energy activity a day*

* See page 86 for an explanation of how we have estimated energy needs.

Examples of how teenagers can meet their energy needs		
GIRLS	**Daily energy needs**	
Moderately active 13 year old girl	**1,910kcal**	3 x 500kcal meals 1 x 250kcal light meal/snack 1 x 200kcal extra **Total = 1,950kcal**
Very active 16 year old girl	**2,700kcal**	3 x 500kcal meals 2 x 250kcal light meals/snacks 3 x 200kcal extras 1 x 100kcal milky drink **Total = 2,700kcal**
BOYS	**Daily energy needs**	
Very active 13 year old boy	**2,940kcal**	3 x 500kcal meals 3 x 200kcal extras 3 x 250kcal light meals/snacks 1 x 100kcal milky drink **Total = 2,950kcal**
Moderately active 17 year old boy	**2,530kcal**	2 x 500kcal meals 3 x 200kcal extras 3 x 250kcal light meals/snacks 2 x 100kcal milky drinks **Total = 2,550kcal**

Examples

Here we give some examples of how young people might eat across a day.

Anjali: 13 year old moderately active girl
Daily energy needs: 1,910kcal

Anjali is 13 years old and is a vegetarian. She has a moderate activity level. She needs a calorie intake of about **1,910kcal a day** to meet all her energy and nutrient needs.	
For breakfast, Anjali has **cornflakes with milk** and an **orange juice** before heading off to school.	**250kcal**
At school break time, she has a 60g bag of **mixed dried fruit and nuts**.	**250kcal**
Anjali stays at school for her lunch and chooses an **egg salad with pitta bread and coleslaw**, a **currant bun**, and an **orange juice** from the canteen.	**500kcal**
After school, she sits down with her family for a **vegetable curry with lentil dhal and rice** and **orange juice** to drink (500kcal), and has an extra **chapatti** (200kcal).	**700kcal**
Before bed she has a **milky drink** and **two digestive biscuits**.	**250kcal**
TOTAL	**1,950kcal**

Isobel: 13 year old very active girl
Daily energy needs: 2,460kcal

Isobel is 13 years old and is training to be a gymnast. She spends at least two hours a day doing high energy expenditure activities. Despite her small size she needs a calorie intake of about **2,460kcal a day** to meet all of her energy and nutrient needs.	
Isobel gets up early for breakfast because she has training before school. She has **weet bisks with milk** and a glass of **orange juice** before heading off to her training session.	**250kcal**
Before Isobel arrives at school she has a **milky drink** and an **oatie cookie** (250kcal), and a piece of fruit (50kcal).	**300kcal**
At break time she has **yoghurt with strawberries**.	**250kcal**
Isobel stays at school for her lunch and chooses **tuna and tomato pasta** with a **side salad** and a glass of **orange juice** (500kcal). She also has a portion of **garlic bread** (200kcal). For dessert she has **rice pudding with mandarins** (250kcal).	**950kcal**
After school she has another training session. After the session she has a snack of a **banana** and a glass of **milkshake**.	**150kcal**
For dinner she has a **frittata with roasted vegetables and new potatoes** and a glass of **orange juice** (500kcal), and a slice of **melon** (50kcal) for dessert.	**550kcal**
TOTAL	**2,450kcal**

James: 13 year old moderately active boy
Daily energy needs: 2,290kcal

James is 13 years old. He has a moderate activity level and needs a calorie intake of about **2,290kcal a day** to meet all his energy and nutrient needs.	
James doesn't get up in time for much breakfast, but has a **hot chocolate** with a **biscuit** before heading off to school.	**250kcal**
By the time his first break arrives, he feels hungry and has **a portion of baked beans on toast** (250kcal) and a drink of **milk** (100kcal) from the school canteen.	**350kcal**
James lives near the school and goes home for lunch. He has **salmon couscous** with a **salad** and **pitta bread** and a glass of **orange juice**.	**500kcal**
James takes part in some after-school activities and today he has football training at 5pm. Before his training starts, he makes himself a quick snack of **pitta bread crisps with a chilli dip** and some **grapes** and drinks a large glass of **water**.	**250kcal**
After football he sits down with his family for dinner. He has **meatballs in tomato sauce with pasta swirls and salad**, and an **orange juice** (500kcal). He also has some **garlic bread** with his main meal (200kcal). For dessert he has a **baked banana with Greek yoghurt** (250kcal).	**950kcal**
TOTAL	**2,300kcal**

Oliver: 13 year old very active boy
Daily energy needs: 2,940kcal

Oliver is 13 years old and at a residential school. He has a high activity level, spending about two hours a day doing high energy expenditure activities. He needs a calorie intake of about **2,940kcal a day** to meet all of his energy and nutrient needs.	
For breakfast, Oliver has a glass of **orange juice** and a bowl of **fruit and fibre cereal with milk** (250kcal), and some **peanut butter on toast** (250kcal), before heading off to classes.	**500kcal**
At morning break, he has a **scone with jam**.	**250kcal**
School provides a packed lunch today as Oliver is playing in an afternoon sports tournament. He has an **egg and cress baguette** with **vegetable sticks** and a **carton of orange juice** (500kcal) and a **banana** (50kcal).	**550kcal**
After the tournament, the team is given a snack of **crackers and cheese**, with **apple slices** (250kcal), and **strawberry milkshake** (100kcal).	**350kcal**
For tea, Oliver has **macaroni cheese with broccoli** and a **brown roll** and a glass of **orange juice** (500kcal). For dessert, he has **pancakes with banana and Greek yoghurt** (250kcal).	**750kcal**
During the evening Oliver plays table tennis and on an active computer game with his friends and snacks on some **tortilla chips** (200kcal) and a **smoothie** (100kcal).	**300kcal**
Before bed Oliver has a **hot chocolate** with a **biscuit**.	**250kcal**
TOTAL	**2,950kcal**

Javier: 16 year old very active boy
Daily energy needs: 3,250kcal

Javier is 16 years old and has just started an apprenticeship and is based at college two days a week. He has high activity levels. He spends about two hours a day doing high-energy activities. He needs a calorie intake of about **3,250kcal a day** to meet his energy and nutrient needs.	
Before his first college class starts, Javier likes to sit down for a large breakfast. He has a bowl of **porridge with jam** and a **fruit juice** (250kcal), followed by a **Mexican scrambled egg wrap** (250kcal). He then cycles about two miles to college.	**500kcal**
During his first break, Javier has some **popcorn,** a **smoothie** and some **orange wedges** which he has brought from home.	**250kcal**
He often feels very hungry at lunchtime. He has **chicken fajitas with sweetcorn** and a **fruit juice** (500kcal), a side order of **chips** (200kcal), and a piece of **fruit** (50kcal), from the college canteen.	**750kcal**
After college, he cycles to a friend's house and they make themselves **two fish finger sandwiches** each (250kcal x 2) and he also has an **apple** (50kcal) and a big glass of water before heading off to the leisure centre to play 5 a side.	**550kcal**
Later that evening, Javier has **chilli con carne with rice and green beans** and an **orange juice** (500kcal). He also has some **tortilla chips** (200kcal). For dessert he has **a small sponge pudding and custard** (250kcal).	**950kcal**
Before bed he has a **hot chocolate** with an **oaty raisin cookie**.	**250kcal**
TOTAL	**3,250kcal**

Alisha: 17 year old moderately active girl
Daily energy needs: 2,100kcal

Alisha is 17 and is in the second year of college. She needs a calorie intake of **2,100kcal per day** to meet her energy and nutrient needs.	
Alisha is off college today and doesn't get out of bed until lunchtime. When she gets up, she has a **peanut butter and banana sandwich**, some **apple slices** and a glass of **orange juice** and then watches a film on DVD.	**500kcal**
She then spends some time working on her college project before feeling hungry again. By this time her mum is back from work and they sit down and have some **chicken piri piri with rice and salad** and a **glass of juice** (500kcal), and some **fruit** (50kcal).	**550kcal**
Afterwards she goes to her friend's house. While she is there, her friend makes a **tuna pasta salad** with **French bread** (500kcal), and Alisha joins her for the meal. They each have a **satsuma** (50kcal) afterwards.	**550kcal**
They go to meet up with some other friends. Alisha has a **hot chocolate** with a **cookie**.	**250kcal**
Alisha comes home quite late and is feeling a bit hungry, so she has a bowl of **cereal with milk** and a glass of **orange juice**, before she goes to bed.	**250kcal**
TOTAL	**2,100kcal**

Chloe: 17 year old inactive girl
Daily energy needs: 1,900kcal

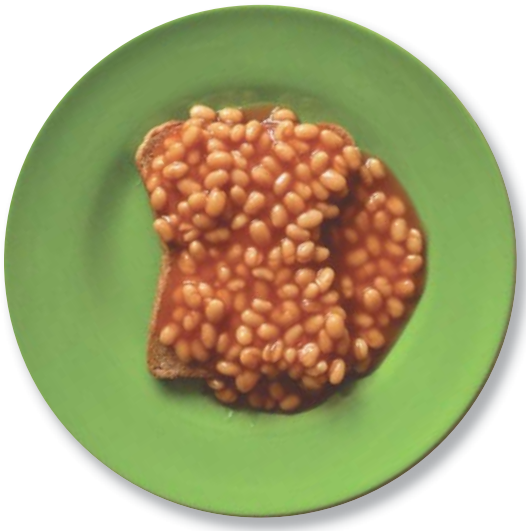
Chloe is 17 years old and is in the second year of college. She drives to college, sits down for most of the day and has a sedentary lifestyle. She needs a calorie intake of about **1,900kcal a day** to meet her energy and nutrient needs.	
As it is a Sunday, Chloe is not at college. When she gets up she has a bowl of **mini weet bisks with milk** and a glass of **orange juice** (250kcal). She then spends some time on the computer checking her emails and takes a **milky coffee** and a **biscuit** (250kcal) and an apple (50kcal) with her.	**550kcal**
Later she watches a film on DVD. She makes a snack of **popcorn, a fruit smoothie** and some **fresh fruit** to watch the film with.	**250kcal**
She has a **roast** for lunch with a glass of **orange juice** (500kcal), and a **baked banana and Greek yogurt** (250kcal) for dessert.	**750kcal**
Chloe goes out to see a friend later and when she comes in makes a speedy **pizza** (250kcal) and has a **milky coffee** (100kcal) before bed.	**350kcal**
TOTAL	**1,900kcal**

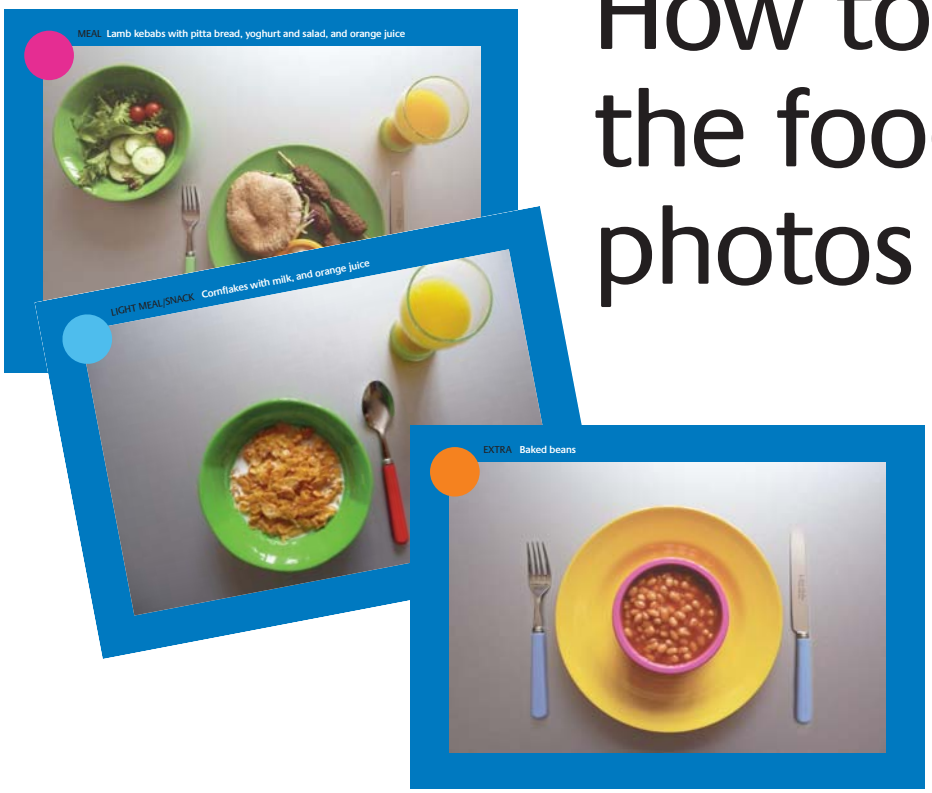
Sam: 16 year old inactive boy
Daily energy needs: 2,400kcal

Sam is 16 years old and has a sedentary lifestyle as he is currently job hunting. He needs a calorie intake of about **2,400kcal a day** to meet his energy and nutrient needs.	
Sam gets up quite late and has a **milky coffee** (100kcal) and a **banana** (50kcal) before catching a bus to the job centre.	**150kcal**
When he gets home his sister makes him a **falafel and houmous pitta** with **carrot sticks** and an **orange juice** (500kcal) and he also has some **tortilla chips** (200kcal).	**700kcal**
After making some job applications on line he meets up with his friend to play a game on a games console. They each have **two fish finger sandwiches** (500kcal) and a **milkshake** (100kcal).	**600kcal**
Later in the evening he has **spicy beef and pepperoni pizza** with a **side salad** and a glass of **orange juice** (500kcal), and has some **baked beans** (200kcal) and **chips** (200kcal) with it, and an **apple** (50kcal).	**950kcal**
TOTAL	**2,400kcal**

Kai: 17 year old moderately active boy
Daily energy needs: 2,530kcal

Kai is 17 years old and is studying A levels at college. He is moderately active and needs a calorie intake of about **2,530kcal a day** to meet his energy and nutrient needs.	
Kai grabs a **banana** before leaving for college.	**50kcal**
During his first break he goes to the canteen and gets some **beans on toast** (250kcal) with an **extra portion of beans** (200kcal), and a **milky coffee** (100kcal).	**550kcal**
At lunchtime Kai has a **tomato and avocado bagel**, and a **satsuma** with a glass of **orange juice** (500kcal), and some extra **chips** (200kcal), from the college café.	**700kcal**
After college Kai goes to a sports centre to use the climbing wall. Afterwards he has a **mini tuna melt** (250kcal) some **tortilla chips** (200kcal) and a **milkshake** (100kcal).	**550kcal**
Later in the evening Kai has **spaghetti Bolognese** with **salad** and **orange juice** (500kcal), and some **garlic bread** (200kcal)	**700kcal**
TOTAL	**2,550kcal**





How to use the food photos

This resource contains photos of a range of meals and snacks for 12-18 year olds, as listed on pages 35-37. The photos are on the CD-ROM included with this book.

The aim of the photos is:

- to show typical portion sizes to aim at for 12-18 year olds, and
- to show what the foods look like.

The photos may be useful:

- for those responsible for menu planning or preparing food for 12-18 year olds
- for supporting those who may want to know more about eating well for 12-18 year olds
- to show to young people so that they can become familiar with different foods, and to help them choose things they would like to try.

For each photo we give:

- the name of the food and the approximate energy value
- recipes for most of the items shown.

Plate sizes

The actual dimensions of the plates and dishes used in the food photos are shown below and on the next pages. If you wish to use sample plates for training purposes, you can print these photos from the PDF called *12-18 Years Plates.pdf* that is on the accompanying CD-ROM. Laminate the pages and cut out the plate shapes.

Side plate

Large plate

Snack bowl

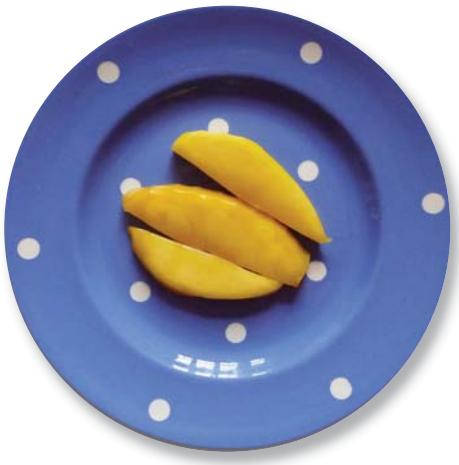
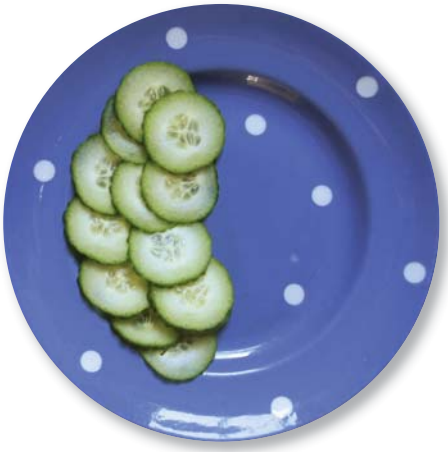
Mini bowl

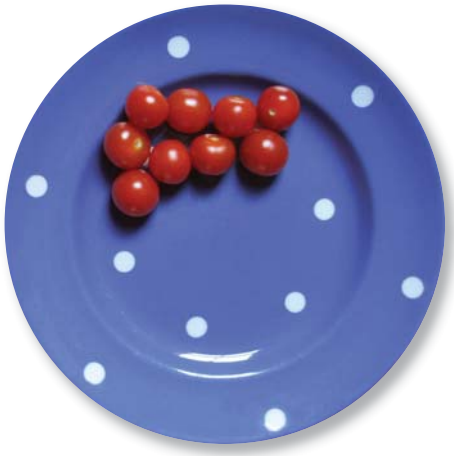
Cereal bowl




Fruit and vegetables: portion sizes for 12-18 year olds





Young people should have at least 5 portions of a variety of fruit and vegetables each day. At least three of these should be vegetables and two fruit.

1 portion of fruit or vegetables can be:

- A serving of fruit or vegetables – fresh, frozen or canned. A serving means about 80g or more. That's about 3 heaped tablespoons.
- 1 medium-sized fruit – for example, an apple
- 1 glass (150ml) of 100% fruit juice, or
- 1 heaped tablespoonful of dried fruit.

Only one of the 5 daily portions should be a fruit juice, as it is important to have 'whole' fruits and vegetables which contain fibre and other important nutrients.

Photos showing what 1 portion of different types of fruits and vegetables looks like are shown on pages 57-74 of this book.

Fruit portions

Apple quarters (100g)
Apple slices (100g)
Banana (100g)
Banana slices (100g)
Black grapes (80g)
Blueberries (80g)
Dried apricots (40g)
Dried prunes (40g)
Kiwi (80g)
Mandarin orange segments (80g)
Mandarin orange segments with juice (130g)
Mango (100g)
Melon (100g)
Orange segments (100g)
Peach (80g)
Pear quarters (100g)
Pear slices (100g)
Plum (80g)
Raisins (40g)
Raspberries (80g)
Satsuma (90g)
Stewed fruit (100g)
Strawberries (80g)
White grapes (80g)

Vegetable portions

Baby sweetcorn (80g)
Baked beans (80g)
Broad beans (80g)
Broccoli (80g)
Brussels sprouts (80g)
Cabbage (80g)
Carrots – sliced (80g)
Carrot sticks (80g)
Cauliflower (80g)
Cherry tomatoes (80g)
Courgette (80g)
Cucumber (80g)
Green beans (80g)
Grilled tomato (80g)
Kale (80g)
Leeks (80g)
Lettuce (80g)
Mange tout (80g)
Mixed beans (80g)
Mixed salad (80g)
Mixed vegetables – frozen (80g)
Parsnip (80g)
Peas (80g)
Red and green pepper (80g)
Red cabbage (80g)
Spinach (80g)
Stir-fry vegetables (80g)
Swede (80g)
Sweetcorn (80g)
Tomatoes (80g)

FRUITS

FRUITS

Apple slices
(100g)

Apple quarters
(100g)

Banana slices
(100g)

Banana
(100g)

Blueberries
(80g)

Black grapes
(80g)

FRUITS

Dried prunes
(40g)

Dried apricots
(40g)

Mandarin orange
segments (80g)

Kiwi
(80g)

Mango
(100g)

Mandarin orange
segments with juice
(130g)

FRUITS

FRUITS

Orange segments
(100g)

Melon
(100g)

Pear quarters
(100g)

Peach
(80g)

Plum
(80g)

Pear slices
(100g)

FRUITS

FRUITS

Raspberries
(80g)

Raisins
(40g)

Stewed fruit
(100g)

Satsuma
(90g)

White grapes
(80g)

Strawberries
(80g)

VEGETABLES

VEGETABLES

Baked beans (80g)

Baby sweetcorn (80g)

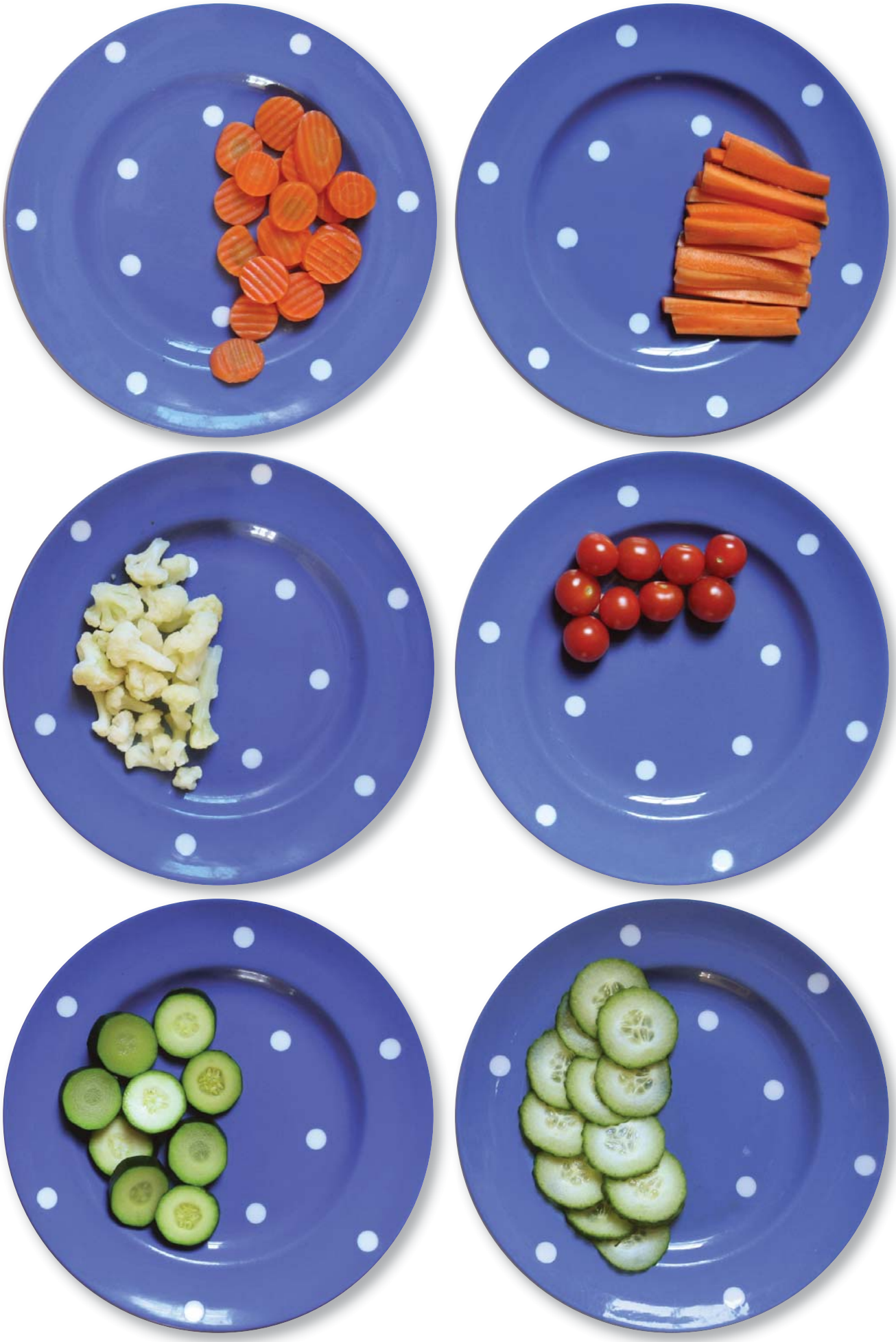
Broccoli (80g)

Broad beans (80g)

Cabbage (80g)

Brussels sprouts (80g)

VEGETABLES



VEGETABLES

Carrot sticks
(80g)

Carrots – sliced
(80g)

Cherry tomatoes
(80g)

Cauliflower
(80g)

Cucumber
(80g)

Courgette
(80g)

VEGETABLES

VEGETABLES

Grilled tomato
(80g)

Green beans
(80g)

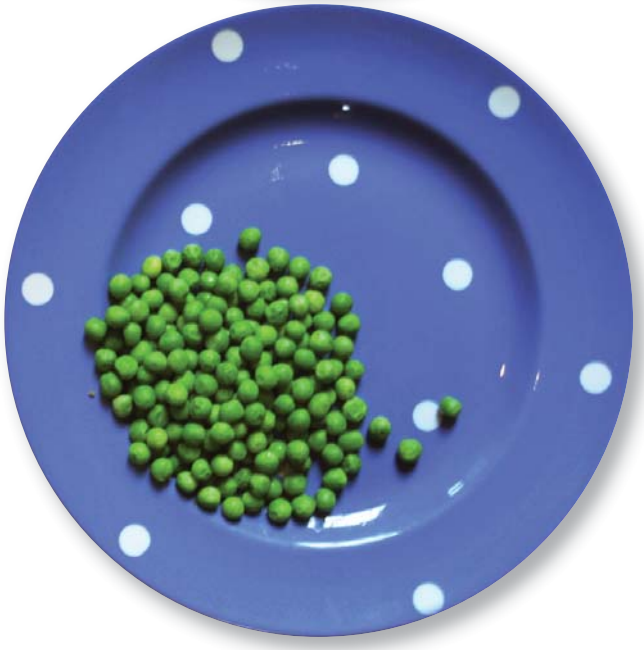
Leeks
(80g)

Kale
(80g)

Mange tout
(80g)

Lettuce
(80g)

VEGETABLES



VEGETABLES

Mixed salad (80g)

Mixed beans (80g)

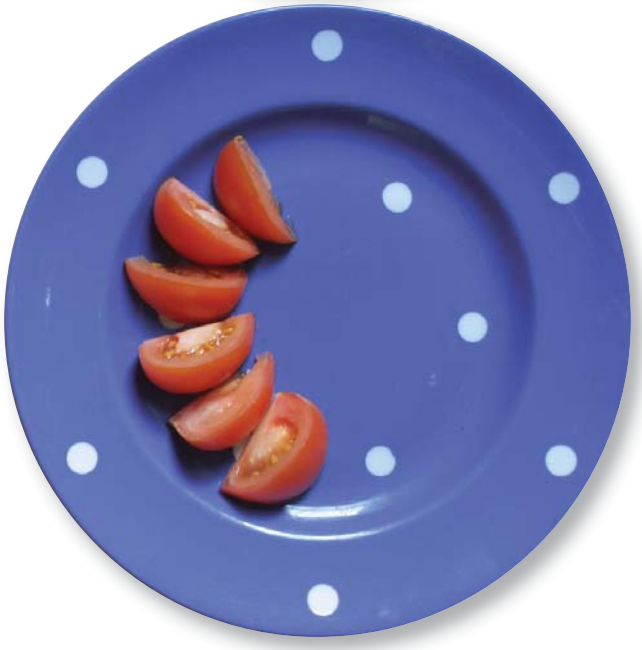
Parsnip (80g)

Mixed vegetables – frozen (80g)

Red and green pepper (80g)

Peas (80g)

VEGETABLES



VEGETABLES

Spinach
(80g)

Red cabbage
(80g)

Swede
(80g)

Stir-fry vegetables
(80g)

Tomatoes
(80g)

Sweetcorn
(80g)

Additional information

Food-based guidance

This section contains some information about the five food groups and how to choose foods which will make up a healthy, balanced diet.

It is also useful to look at the traffic-light labels, nutrition information labels and ingredients lists on foods, and to choose those that are lower in salt, sugar and fat. (See pages 16 and 23 for more information on food labels.) The Food Standards Agency provides information on what is 'a lot' of fat, saturated fat, sugar and salt in foods. This is outlined below.

Foods **high in fat** have more than 20g of fat per 100g of food.	Foods **low in fat** have 3g of fat or less per 100g of food.
Foods **high in saturated fat** have more than 5g of saturated fat per 100g of food.	Foods **low in saturated fat** have 1.5g of saturated fat or less per 100g of food.
Foods **high in sugar** have more than 15g of sugars per 100g of food.	Foods **low in sugar** have 5g of sugars or less per 100g of food.
Foods **high in salt** have more than 1.5g of salt per 100g of food or more than 0.6g (600mg) of sodium per 100g of food.	Foods **low in salt** have 0.3g of salt or less per 100g of food or 0.1g (100mg) of sodium or less per 100g of food.

Food group: Bread, rice, potatoes, pasta and other starchy foods

Advice	Why?	What's included
Starchy foods – which include bread, rice, potatoes and pasta – should make up a third of the daily diet. A variety of breads should be available daily at mealtimes. Different starchy foods should be offered in main meals throughout the week, so that a variety of starchy foods are included. Aim to include pasta and rice on the menu once a week. Wholegrain and wholemeal cereal foods are a good source of fibre and other nutrients.	Starchy foods are a good source of energy and the main source of a range of nutrients in the diet. As well as starch, these foods supply fibre, calcium, iron and B vitamins.	All varieties of bread including wholemeal, granary and seeded breads, chapattis, bagels, roti, tortillas and pitta bread Potatoes, yam, cocoyam, dasheen, breadfruit and cassava Breakfast cereals Rice, couscous, bulgar wheat, maize (polenta) and cornmeal Noodles, spaghetti and other pastas

Tips

- Serve more pasta and rice and use less sauce. Opt for tomato-based sauces instead of cheese-based sauces.
- When serving rice and pasta, try to use wholemeal, wholegrain, brown or high-fibre versions.
- Some breakfast cereals are nutrient-fortified (that is, with added iron, folic acid and other vitamins and minerals). Choose wholegrain cereals or mix some in with other cereals.
- Offer a variety of breads, such as seeded, wholegrain and granary, and use thicker slices with low-fat options for fillings.
- If you are making chips or fried potatoes, use large pieces of potato and have thick or straight-cut chips as these absorb less fat.
- Baked potatoes do not need to have butter or margarine added when served with moist fillings or sauces.
- For people who have allergies to wheat, oats, barley and rye – good alternatives to offer are foods made from maize (such as polenta), rice, rice flour, potatoes, potato flour, buckwheat, sago, tapioca, soya and soya flour.
- Cereal foods which are good sources of iron and zinc include fortified cereals, wholegrain cereals, wholemeal bread and flour, couscous and wholemeal pasta.

Food group: Fruit and vegetables

Advice	Why?	What's included
Fruit and vegetables should make up about a third of the daily diet. It is important to offer a variety. 5 portions a day is an achievable target. Aim for 1 or 2 portions of fruit or vegetables with each meal, and offer fruit and vegetables as snacks. One portion is about 80g of fresh, frozen or canned fruit or vegetables, or about 40g of dried fruit. A glass of 100% fruit juice can count as 1 portion of fruit each day.	Fruit and vegetables are good sources of many vitamins and minerals. There is evidence that consuming 400g or more of fruit and vegetables a day reduces the risk of developing chronic diseases such as coronary heart disease and some cancers. Including fruits and vegetables in the diet will help to increase the intake of fibre, and can help to reduce the total amount of calories consumed among those who may wish to lose weight.	All types of fresh, frozen and canned vegetables – for example, broccoli, Brussels sprouts, cabbage, carrots, frozen peas, peppers, swede and sweetcorn Beans and pulses, including baked beans, chick peas and kidney beans All types of salad vegetables, including lettuce, cucumber, tomato, raw carrots, peppers and beetroot All types of fresh fruit – for example, apples, bananas, kiwi fruit, oranges, pears, mango and plums All types of canned fruit in fruit juice – for example, pineapple, peaches and mandarin oranges Stewed fruit Dried fruit Fruit juice (100% juice)

Tips

- Steaming or cooking vegetables with minimum amounts of water, and serving them as soon as possible, will help retain vitamins.
- Use fresh fruit and vegetables as soon as possible, rather than storing them, to avoid vitamin loss.
- Incorporate fruit and vegetables in snack options. Offer a variety of healthy snack alternatives.
- Add vegetables and pulses to curries, casseroles or stir-fry dishes and serve at least two types of vegetables with fish, chicken or meat.
- Baked beans should be served no more than twice a week.
- Encourage people to have a daily glass of fruit juice (100% juice, unsweetened) with meals.
- Add a handful of dried fruit to cereal options and porridge.
- Offer traditional salads as well as raw vegetables, to increase colour, taste and texture at mealtimes.
- Add extra vegetables to savoury dishes.
- Vegetable soups are a useful way of increasing vegetable intake.
- Avoid dried fruit that has added sugar or vegetable oil.
- Fruit and vegetables which are useful sources of iron include spinach, broccoli, spring greens, dried apricots, raisins, baked beans, broad beans and blackcurrants.
- Fruit and vegetables which are useful sources of folate include spinach, broccoli, peas, oranges, melon, green leafy salads and tomatoes.
- Fruit and vegetables which are useful non-dairy sources of calcium include green leafy vegetables, dried fruit and oranges.

Food group: Milk and dairy products

Advice	Why?	What's included
Offer dairy foods such as milk, yoghurt and cheese as part of meals and snacks. Offer low-fat options such as semi-skimmed milk, low-fat yoghurt and reduced-fat cheeses. Don't rely on cheese as the main protein item for vegetarians.	Milk and dairy products are good sources of calcium, protein and vitamin A. Calcium helps to contribute to good bone health. The fat content of different dairy products varies and much of this is saturated fat.	Skimmed, semi-skimmed and whole milk Dried milk, goat's and sheep's milk All types of cheeses – for example, Cheddar cheese, cottage cheese, cheese spreads, Brie, feta, Edam, goat's cheese, Stilton and Parmesan Yoghurt Fromage frais

Tips

- Choose reduced-fat hard cheeses, cottage cheese or low-fat soft cheese.
- Some dairy products can contain high levels of salt. Look for lower-salt cheeses and use smaller amounts of stronger cheese rather than larger amounts of milder cheese.
- Offer semi-skimmed or skimmed milk and low-fat yoghurts and fromage frais.
- Use plain yoghurt or fromage frais instead of cream, soured cream or crème fraîche in recipes.
- Try serving frozen yoghurts as an alternative to ice cream.
- For those on dairy-free diets, serve soya drinks fortified with calcium as an alternative to milky drinks.
- Restrict sweetened milk drinks to mealtimes, as the sugars in these drinks can damage the teeth.

Food group: Meat, fish, eggs, beans and other non-dairy sources of protein

Advice	Why?	What's included
Offer a variety of meat and meat alternatives at main meals. Use lean meat (meat which has a fat content of about 10%). Fish should be offered at least twice a week. It is strongly recommended that oil-rich fish – such as salmon, trout, mackerel, herring, pilchards or sardines – should be served once a week. Eggs can be served at breakfast and as part of main meals. Make sure that meat alternatives for vegetarians are varied.	Meat and meat alternatives are a good source of protein, vitamins and minerals such as iron and zinc. Some meat and meat products can contain a lot of fat and saturated fat. White fish is low in fat. Oil-rich fish provides a good source of omega-3 fats, which may help to protect against heart disease. Oil-rich fish are also a source of vitamins A and D. Eggs are a good source of protein, vitamin A, vitamin D and some minerals. Beans, pulses, eggs, meat alternatives and nuts all provide good sources of nutrients.	Meat includes all cuts of beef, pork, lamb, poultry, offal and meat products such as bacon, sausages, beefburgers, pies and cold meats. Fish includes fresh, frozen and canned fish, such as tuna and sardines. Fish products such as fish cakes and fish fingers may have a low fish content. Boiled, poached or scrambled eggs, or omelettes Beans and pulses such as chick peas, lentils, kidney beans, butter beans, textured vegetable protein, nuts, and soya products such as tofu and Quorn

Tips

- Always choose the leanest cuts of meat and remove visible fat and poultry skin.
- Roast meat on a rack in order to let the fat run off.
- Grill, poach or roast meat rather than frying. If you do fry, use clean oil and at the correct temperature to minimise absorption. Note that larger pieces of fish and meat absorb less fat.
- Don't add extra fat or oil when cooking meat.
- Use more vegetables, pulses and starchy food to extend dishes further, and to add more texture and flavour. This will also mean that less meat is needed, reducing both the fat content and the cost of the meal.
- Buy good-quality meat and use smaller amounts.
- Use fish from sustainable fish stocks. Look for the Marine Stewardship Council logo.
- Offer unsalted nuts and seeds as snacks.
- Reduce the amount of processed meat products served, such as meat pies and pasties, sausages, burgers and coated chicken products.
- Reduce the amount of processed fish products on offer, particularly those that are fried or coated, such as fish fingers or fish cakes.

Food group: Foods and drinks high in fat and/or sugar

Advice	Why?	What's included
These foods can add palatability to the diet but should be eaten in small amounts each day. Reduce the amount of foods containing fat – for example, fat spreads and butter, cooking oils and mayonnaise. Other foods containing fat and sugar – such as cakes and biscuits – should be eaten only occasionally.	Foods containing fat and foods containing sugar often provide a lot of calories and a lower proportion of other nutrients. Some foods in this group are also high in sodium/salt. Foods and drinks containing sugar often contain few other nutrients, and having them frequently between meals can contribute to tooth decay.	Foods containing fat include: butter, margarine, other spreading fats and low-fat spreads, cooking oils, oil-based salad dressings, mayonnaise, cream, chocolate, crisps, biscuits, pastries, cakes, puddings, ice cream, rich sauces, and gravies. Foods and drinks containing sugar include: soft drinks, sweets, chocolate, jams, sugar, cakes, puddings, biscuits, pastries and ice cream.

Tips

- Use fat spreads rich in monounsaturated or polyunsaturated fats.
- Use cooking oils high in monounsaturates, such as soya, rapeseed or olive oils.
- Measure oil for cooking carefully and reduce the amount of oil used in the preparation of soups, stews and casseroles. Vegetables can often be dry-fried, steamed or stewed to form the basis of sauces and other dishes.
- Avoid serving pastry dishes frequently.
- Use low-fat yoghurt or non-dairy ice cream to complement puddings or pies.
- Produce puddings lower in fat and sugar and incorporate fresh fruit, canned fruit in juice or dried fruit.
- Offer water, unsweetened fruit juices and chilled milk drinks rather than sugary soft drinks.
- Serve wholegrain or plain cereals rather than sugar-coated cereals.
- When preparing sandwiches, try and avoid using butter or spreads if the filling is already moist.

To increase the amount of vitamin D in menus

- Use fat spreads fortified with vitamin D for baking or as a fat spread.
- Include an oil-rich fish that is rich in vitamin D in the menu at least once a week – for example, herring, mackerel, pilchards, salmon, sardines, trout, roe, or canned tuna fish.
- Egg yolks are also rich in vitamin D.
- Meat and poultry contribute small but significant amounts of vitamin D.

Good sources of vitamins and minerals

This table shows a number of foods and drinks which are important sources of certain vitamins and minerals. These are based on average servings.

	EXCELLENT	GOOD	USEFUL
B VITAMINS			
Thiamin	liver and liver pâté pork, bacon and ham fortified breakfast cereals malted drinks	wholemeal bread yeast extract oatcakes currant buns nuts potatoes	lean meat chicken and other poultry eggs white or brown bread semi-sweet biscuits
Riboflavin	liver kidney	milk malted drinks fortified breakfast cereals almonds	lean meat or poultry bacon mackerel, tuna, salmon sardines, pilchards cheese yoghurt eggs
Niacin	fortified breakfast cereals canned salmon, tuna pilchards chicken	lean meat sausages kidneys herrings sardines	wholemeal bread peanut butter yeast extract bacon liver sausage
Folate	most fortified breakfast cereals, eg cornflakes, branflakes, crisped rice liver spinach	yeast extract cabbage Brussels sprouts broccoli peas orange melon kidney	wholemeal bread/flour weet bisks cauliflower beef runner beans tomatoes parsnip potatoes green leafy salads ackee peanuts
VITAMIN C			
	blackcurrants orange (and orange juice) strawberries canned guava spring greens green and red peppers (raw)	broccoli, cabbage cauliflower, spinach tomato Brussels sprouts watercress kiwi fruit mango grapefruit	potatoes green beans peas satsumas eating apples nectarines peaches raspberries blackberries

	EXCELLENT	GOOD	USEFUL
VITAMIN A			
	liver liver sausage/pâté carrots spinach sweet potatoes watercress red peppers mango canteloupe melon dried apricots	nectarine peach blackcurrants fresh/canned apricots watercress tomatoes cabbage (dark) broccoli Brussels sprouts runner beans broad beans margarine butter cheese kidney	canned salmon herrings egg honeydew melon prunes orange sweetcorn peas whole milk
VITAMIN D			
	fortified breakfast cereals herrings pilchards sardines tuna canned salmon egg	liver (other than chicken liver) liver sausage/pâté margarine	chicken liver
CALCIUM			
	spinach sardines cheese tofu	pilchards yoghurt milk (all types) soya drink fortified with calcium cheese spread	canned salmon muesli white bread/flour peas, beans, lentils dried fruit orange egg yolk
IRON			
	fortified breakfast cereals pig liver kidney chicken liver liver sausage/pâté	wholemeal bread/flour weet bisks beef, beefburger corned beef lamb sardines, pilchards soya beans chick peas, lentils spinach, broccoli spring greens dried apricots raisins	white bread baked beans broad beans black-eyed peas blackcurrants salmon, tuna herrings sausage chicken and other poultry egg tofu

	EXCELLENT	GOOD	USEFUL
ZINC			
	liver kidney lean meat corned beef	bacon ham poultry canned sardines shrimps and prawns tofu wholegrain breakfast cereals, eg puffed wheat, branflakes, weet bisks nuts	sausages cold cooked meats canned tuna or pilchards eggs milk, cheese beans and lentils brown or wholemeal bread plain popcorn sesame seeds
FIBRE			
(Non-starch polysaccharides - NSP)	wholegrain/wholewheat breakfast cereals such as branflakes, weet bisks, shreddies, shredded wheat, sultana bran wholemeal bread wholemeal pitta bread baked beans chick peas, kidney beans (and most beans) lentils dried apricots dried figs dried prunes	muesli wholemeal pasta brown bread wheatgerm bread white bread with added fibre baked potato with skin chips sweet potato broad beans fresh and frozen peas sweetcorn broccoli Brussels sprouts okra Quorn avocado blackberries dried dates almonds, hazelnuts peanuts twiglets	puffed wheat cereal brown rice white pitta bread pizza potatoes yam houmous canned peas cabbage carrots plantain banana mango raisins sunflower seeds potato crisps

Dietary reference values for 12-18 year olds

Dietary reference values and derived amounts for nutrients per day: BOYS				
	Dietary reference value (DRV)		**11-14 years**	**15-18 years**
Energy	EAR	kcals	2,220	2,755
Fat	DRV: average 35% of food energy*	g	86.3	107.1
Saturated fat	DRV: average 11% of food energy*	g	27.1	33.7
Total carbohydrate	DRV: average 50% of food energy*	g	296.0	367.3
Non-milk extrinsic sugars	DRV: average 11% of food energy*	g	65.1	80.8
Fibre	Proportion of DRV for adults (18g)/CRV**	g	17.8	22.1
Protein	RNI	g	42.1	55.2
Iron	RNI	mg	11.3	11.3
Zinc	RNI	mg	9.0	9.5
Calcium	RNI	mg	1,000	1,000
Vitamin A	RNI	µg	600	700
Vitamin C	RNI	mg	35	40
Folate	RNI	µg	200	200
Sodium	SACN recommendation	mg	2,353	2,353

* As there is no absolute requirement for sugars or fats (except essential fatty acids), these values represent a maximum.

** The Dietary Reference Value for non-starch polysaccharides (fibre) is 18g for adults, and children should eat proportionately less, based on their lower body size. For pragmatic reasons, this has been calculated as a percentage of the energy recommendation, to give the Calculated Reference Value. The calculated NSP guideline is 8g per 1,000kcal.

EAR = Estimated Average Requirement
RNI = Reference Nutrient Intake
SACN = Scientific Advisory Committee on Nutrition

Energy values

Energy values calculated from the amount of fat, carbohydrate and protein in these tables will not equal total energy EAR for two reasons. Firstly, the protein values here are based on the RNI figures, which are equivalent to protein providing about 8% of food energy whereas in typical British diets protein provides about 15% of food energy. This was accounted for in the estimates of % food energy from fat and carbohydrate when these figures were estimated by the Department of Health in 1991. Secondly, the carbohydrate DRV (excluding that for NMES) is a minimum figure and intakes may be greater than this and therefore contribute higher calorie intakes.

Dietary reference values and derived amounts for nutrients per day: GIRLS

	Dietary reference value (DRV)		11-14 years	15-18 years
Energy	EAR	kcals	1,845	2,110
Fat	DRV: average 35% of food energy*	g	71.8	82.1
Saturated fat	DRV: average 11% of food energy*	g	22.6	25.8
Total carbohydrate	DRV: average 50% of food energy*	g	246.0	281.3
Non-milk extrinsic sugars	DRV: average 11% of food energy*	g	54.1	61.9
Fibre	Proportion of DRV for adults (18g)/CRV**	g	14.8	16.9
Protein	RNI	g	41.2	45.0
Iron	RNI	mg	14.8	14.8
Zinc	RNI	mg	9.0	7.0
Calcium	RNI	mg	800	800
Vitamin A	RNI	µg	600	600
Vitamin C	RNI	mg	35	40
Folate	RNI	µg	200	200
Sodium	SACN recommendation	mg	2,353	2,353

* As there is no absolute requirement for sugars or fats (except essential fatty acids), these values represent a maximum.

** The Dietary Reference Value for non-starch polysaccharides (fibre) is 18g for adults, and children should eat proportionately less, based on their lower body size. For pragmatic reasons, this has been calculated as a percentage of the energy recommendation, to give the Calculated Reference Value. The calculated NSP guideline is 8g per 1,000kcal.

EAR = Estimated Average Requirement
RNI = Reference Nutrient Intake
SACN = Scientific Advisory Committee on Nutrition

Energy values

Energy values calculated from the amount of fat, carbohydrate and protein in these tables will not equal total energy EAR for two reasons. Firstly, the protein values here are based on the RNI figures, which are equivalent to protein providing about 8% of food energy whereas in typical British diets protein provides about 15% of food energy. This was accounted for in the estimates of % food energy from fat and carbohydrate when these figures were estimated by the Department of Health in 1991. Secondly, the carbohydrate DRV (excluding that for NMES) is a minimum figure and intakes may be greater than this and therefore contribute higher calorie intakes.

How the energy values on page 9 were calculated

Average energy figures have been calculated for groups of young people across age groups. These are shown in the tables on page 85 and above and are based on average weights of young people across the age range doing moderate amounts of activity. Where we have suggested different figures for specific ages of girls or boys at different energy expenditures, we have calculated these based on data from tables 2.1, 2.2 and 2.3 of the 1991 publication *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom*. All energy calculations are based on average figures and individual young people can have widely different energy requirements.

Resources

This section contains further information about eating well and menu planning for 12-18 year olds.

ORGANISATIONS

Allergy UK
Planwell House
Lefa Business Park
Edgington Way
Sidcup
Kent DA14 5BH
T: 01322 619898
E: info@allergyuk.org
www.allergyuk.org

British Dietetic Association
5th Floor
Charles House
148-9 Great Charles Street
Queensway
Birmingham B3 3HT
T: 0121 200 8080
E: info@bda.uk.com
www.bda.uk.com

British Nutrition Foundation
High Holborn House
52-54 High Holborn
London WC1V 6RQ
T: 020 7404 6504
E: postbox@nutrition.org.uk
www.nutrition.org.uk

Chartered Institute of Environmental Health
Chadwick Court
15 Hatfields
London SE1 8DJ
T: 020 7928 6006
E: info@cieh.org
www.cieh.org

The Coeliac Society
3rd floor
Apollo Centre
Desborough Road
High Wycombe
Bucks HP11 2QW
T: 01494 437278
Helpline: 0845 305 2060

Community Practitioners' and Health Visitors' Association (CPHVA)
Unite the Union
Unite House
128 Theobald's Road
London WC1X 8TN
T: 0207 611 2500
www.unitetheunion.org/cphva

Compassion in World Farming
River Court
Mill Lane
Godalming
Surrey GU7 1EZ
T: 01483 521 950
www.ciwf.org.uk

Department of Health
PO Box 777
London SE1 6XH
T: 0800 555 777
www.dh.gov.uk

Diabetes UK
Macleod House
10 Parkway
London NW1 7AA
T: 020 7424 1000
E: info@diabetes.org.uk
www.diabetes.org.uk

Food Ethics Council
39-41 Surrey Street
Brighton BN1 3PB
T: 0845 345 8574
E: info@foodethicscouncil.org
www.foodethicscouncil.org

Food Standards Agency
www.food.gov.uk
www.eatwell.gov.uk

National Heart Forum
Tavistock House South
Tavistock Square
London WC1H 9LG
T: 020 7383 7638
www.heartforum.org.uk

NHS Direct
T: 0845 4647
www.nhsdirect.nhs.uk

NHS Health Scotland
Woodburn House
Canaan Lane
Edinburgh EH10 4SG
T: 0131 536 5500
www.healthscotland.com

Nutrition Society
10 Cambridge Court
210 Shepherd's Bush Road
London W6 7NJ
T: 020 7602 0228
E: office@nutsoc.org.uk
www.nutritionsociety.org

Public Health Agency for Northern Ireland
18 Ormeau Avenue
Belfast BT2 8HS
T: 028 9031 1611
www.publichealth.hscni.net

School Food Trust
Geraldine Hall Suite
Moorfoot
Sheffield S1 4PQ
T: 0844 800 9048
E: info@sft.gsi.gov.uk
www.schoolfoodtrust.org.uk

Soil Association
South Plaza
Marlborough Street
Bristol BS1 3NX
T: 0117 314 5000
www.soilassociation.org

Vegan Society
Donald Watson House
21 Hylton Street
Hockley
Birmingham B18 6HJ
T: 0121 523 1730
www.vegansociety.com

Vegetarian Society
Parkdale
Dunham Road
Altrincham
Cheshire WA14 4QG
T: 0161 925 2000
www.vegsoc.org

PUBLICATIONS

Caroline Walker Trust publications

For details, see www.cwt.org.uk

Eating Well at School

Eating Well for Looked After Children and Young People

Eating Well for Under-5s in Child Care: Practical and Nutritional Guidelines

Eating Well for Under-5s in Child Care: Training Materials for People Working with Under-5s in Child Care

Eating Well: Children and Adults with Learning Disabilities. Nutritional and Practical Guidelines

Eating Well: Supporting Children and Adults with Learning Disabilities. Training Materials

The publications above include information and recommendations about eating well and practical menu planning. The training materials also include a CD-ROM with useful information about foods, recipes and menu planning.

www.cwt-chew.org.uk

For information about photo resources for children in the first year of life, for children aged 1-4 years and for children aged 5-11 years, see the CHEW website.

Food Standards Agency publications

Available from:
PO Box 369
Hayes, Middlesex UB3 1UT
T: 0845 606 0667
F: 020 8867 3225
Minicom (for people with hearing disabilities): 0845 606 0678
E: foodstandards@eclogistics.co.uk
www.food.gov.uk

Booklets

The Balance of Good Health FSA 0008

The Little Book of Salt FSA1133

Available to download from www.food.gov.uk

Food Allergy: How to Avoid Certain Foods FSA 1248

Food Hygiene: A Guide for Businesses FSA 1020 196

Further information on healthy eating can be obtained from:
www.eatwell.gov.uk
www.salt.gov.uk
www.food.gov.uk

CATERING AND MENU PLANNING

Catering for Health
Produced by the Food Standards Agency and Department of Health. Available free from PO Box 369, Hayes, Middlesex UB3 1UT. T: 0845 6060667

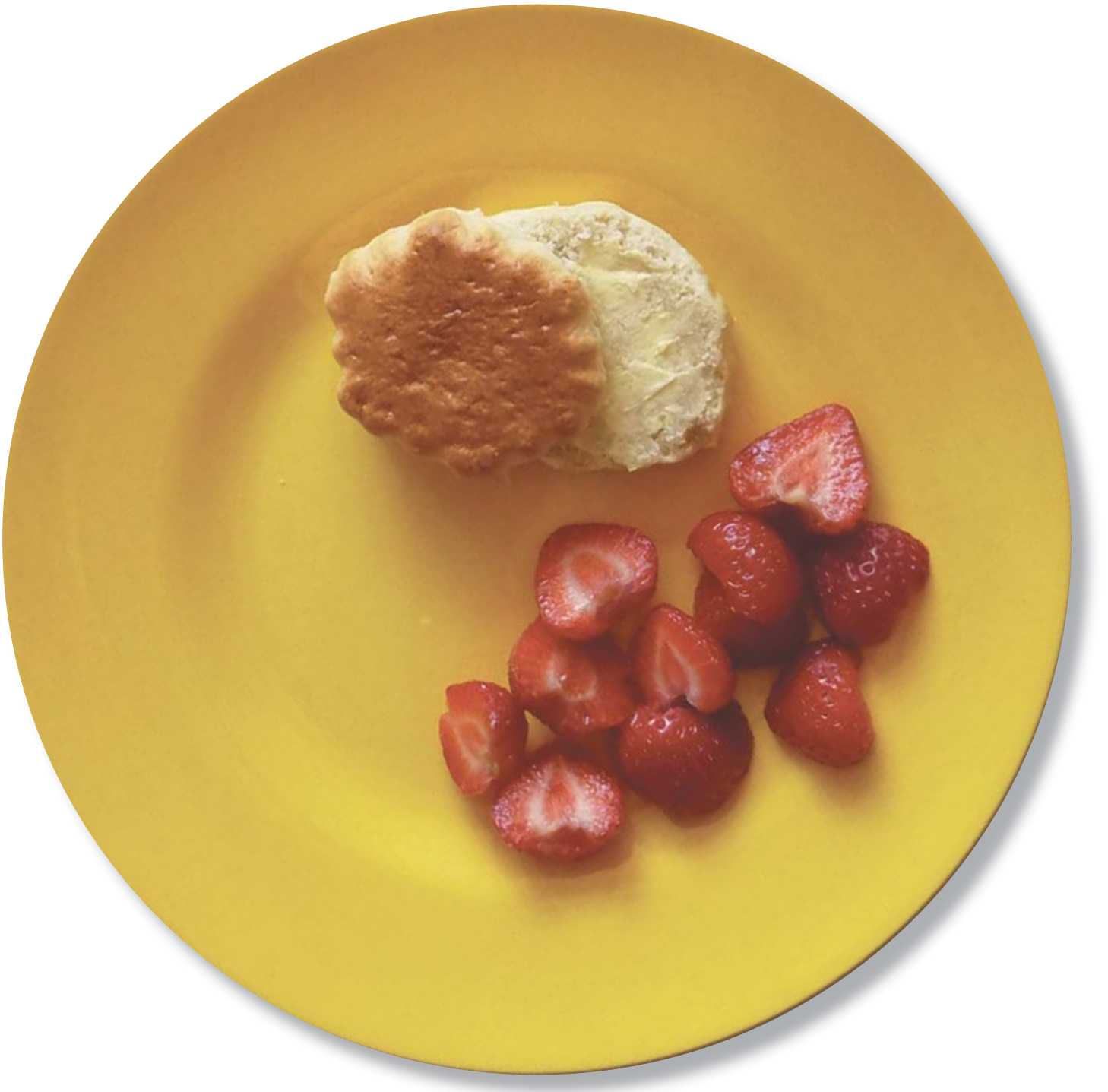
Nutmeg UK
www.nutmeg-uk.com
Provides menu planning software.

TRAINING IN 'EATING WELL'

In the UK, registered dietitians (RD) and registered public health nutritionists (RPHNutr) are the professionals qualified to provide advice and training on good nutrition in public settings. For a list of qualified trainers across the UK, see the CWT website www.cwt.org.uk

Registered dietitians can be found via the British Dietetic Association at www.bda.uk.com or via the website www.dietitiansunlimited.co.uk

Registered public health nutritionists can be found via the Nutrition Society: www.nutritionsociety.org



THE CAROLINE WALKER TRUST

ISBN 978-1-89-782036-0
Eating Well for 12-18 Year Olds: Practical Guide
(including accompanying CD-ROM)

ISBN 978-1-89-782037-7
Eating Well for 12-18 Year Olds: Practical Guide
(including accompanying CD-ROM), plus set of printed
Eating Well for 12-18 Year Olds: Food Photo Cards

www.cwt-chew.org.uk