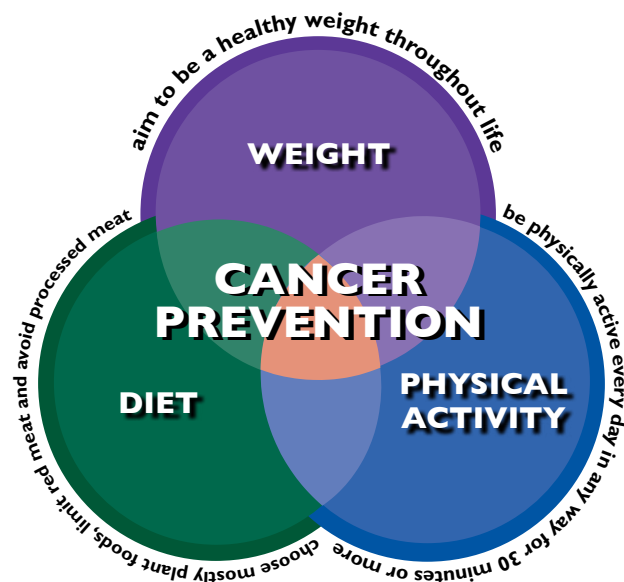


WCRF UK Guidelines for Cancer Prevention



The choices you make about food, physical activity and weight management can reduce your chances of developing cancer

- choose mostly plant foods, limit red meat and avoid processed meat
- be physically active every day in any way for 30 minutes or more
 - aim to be a healthy weight throughout life

And, always remember – do not smoke or chew tobacco

WCRF UK is part of the WCRF global network

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“Stopping cancer before it starts”

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EATING WELL FOR CANCER PREVENTION



Our vision

World Cancer Research Fund (WCRF UK) helps people make choices that reduce their chances of developing cancer

Our heritage

We were the first cancer charity:

- To create awareness of the relationship between diet and cancer risk
- To focus funding on research into diet and cancer prevention
- To consolidate and interpret global research to create a practical message on cancer prevention

Our mission

Today World Cancer Research Fund (WCRF UK) continues:

- Funding research on the relationship of nutrition, physical activity and weight management to cancer risk
- Interpreting the accumulated scientific literature in the field
- Educating people about choices they can make to reduce their chances of developing cancer

WCRF UK is part of the World Cancer Research Fund global network, which consists of the following charitable organisations: The American Institute for Cancer Research (AICR); World Cancer Research Fund UK (WCRF UK); World Cancer Research Fund Netherlands (WCRF NL); World Cancer Research Fund Hong Kong (WCRF HK); World Cancer Research Fund France (WCRF FR); and the umbrella association, World Cancer Research Fund International (WCRF International)

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Choices and chances

At present, around one in three people in the UK will develop cancer at some point during their lifetime, but research gives us hope and shows that cancer isn't simply down to fate or bad luck. Although everyone's starting point for cancer risk is different, scientists estimate that about a third of the most common cancers could be prevented by making changes to the food we eat and the amount of exercise we take, and by maintaining a healthy weight. In addition, choosing not to smoke (or giving up smoking) can play a big role in reducing our risk, as smoking is known to cause about one third of all cancers. Together, these factors have the potential to prevent most cancer cases in the UK and around the world.

Our special Report – *Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective* – reconfirmed what



WCRF UK has always maintained: we can make changes in our lives that will reduce our risk of developing cancer. Published by WCRF/AICR in November 2007, this Report is the result of an exhaustive process involving leading scientists and researchers, and more than 100 peer reviewers and observers. First, nine independent research teams collected all the relevant research on the relationship of diet, physical activity and body size to cancer risk. Together they identified 500,000 studies, which were screened down to 22,000. Eventually, 7,000 of these studies were found to be relevant. A panel of 21 world-renowned experts then compared and evaluated these studies, and drew from them 10 evidence-based Recommendations for preventing cancer.

To make it easy for you to follow these Recommendations, WCRF UK has grouped them into three realistic Guidelines that you can think about and eventually adopt as principles to guide your choices:

- Choose mostly plant foods, limit red meat and avoid processed meat
- Be physically active every day in any way for 30 minutes or more
- Aim to be a healthy weight throughout life

Following any one of these Guidelines is likely to reduce your chances of getting cancer. But following all three offers the greatest protection. In part, this is because the three are so closely related to each other. For instance, your diet has to do with taking in energy (usually measured in calories), and physical activity has to do with expending or burning the energy you have taken in. The key to maintaining a healthy weight lies in balancing your 'energy in' with your 'energy out'.

Diet and physical activity both protect against cancer in two main ways. The evidence shows that the healthy diet described in this booklet helps protect your body against cancer. It also helps you manage your weight, which in turn lowers your cancer risk. Similarly, physical activity offers 'direct' protection from cancer by reducing levels of hormones that are linked to a higher risk of the disease. It also plays a key role in helping you to manage your weight and therefore reduce your cancer risk.

In choosing to follow these three Guidelines you will be choosing to follow a healthier way of life. Making gradual changes to what you eat and your lifestyle will lead, over time, to a leaner, healthier body, and less chance that you will develop cancer or other chronic diseases like heart disease, stroke or diabetes.

Choosing a healthy diet to help prevent cancer

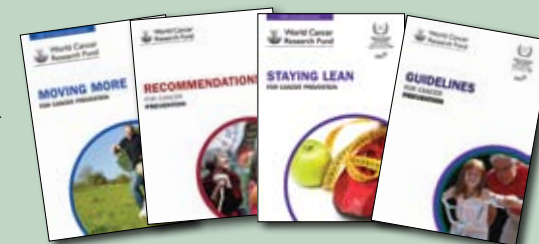
This booklet focuses on WCRF UK's diet Guideline – Choose mostly plant foods, limit red meat and avoid processed meat.



The following Recommendations, developed from our Expert Report, are represented by our diet Guideline:

- ♦ **Avoid sugary drinks. Limit consumption of energy-dense foods (particularly processed foods high in added sugar, or low in fibre, or high in fat)**
- ♦ **Eat more of a variety of vegetables, fruits, wholegrains, and pulses such as beans**
- ♦ **Limit consumption of red meats (such as beef, pork and lamb) and avoid processed meats**
- ♦ **If consumed at all, limit alcoholic drinks to 2 for men and 1 for women a day**
- ♦ **Limit consumption of salty foods and foods processed with salt (sodium)**
- ♦ **Don't use supplements to protect against cancer**

See page 24 for a full list of our Recommendations. Our physical activity and weight guidelines are covered in other booklets – see our website, www.wcrf-uk.org, to find out more.



Putting plant foods first

WCRF UK's Recommendation: *Eat more of a variety of vegetables, fruits, wholegrains, and pulses such as beans*

Scientific research tells us that the type of foods we eat can play a key role in reducing or increasing our cancer risk. Our 2007 review of the body of evidence found that diets based on plant foods offer the greatest protection against cancer. As well as helping us to maintain a healthy weight (which is linked to reduced cancer risk), they also provide nutrients that help keep our bodies healthy.

What are plant foods?

There's a whole range of delicious plant foods to try. Broadly speaking, the plant foods that should form the basis of our diet fit into these categories:

► **Vegetables and fruits** – for good health, aim for at least five portions a day.

► **Starchy foods** – this category includes grains and cereals, pulses, and roots and tubers. Aim to eat less processed versions of these foods with every meal.

♦ **Grains and cereals** – including rice, oats, pasta, bread, cous cous and breakfast cereals. Wholegrain varieties – for example, wholegrain rice and wholemeal pasta – are better for us because they tend to contain more fibre and other beneficial nutrients than the white, refined versions.

♦ **Pulses** – foods such as lentils, chickpeas and beans.

♦ **Roots and tubers** – potatoes and yams.

Why choose plant foods?

Choosing mostly plant foods each day will help protect against cancer for many reasons:

♦ Plant foods are generally low in energy density, meaning that they are low in calories and fat – a great choice to help us watch our weight. Being overweight or obese is linked to several common cancers.

♦ Eating a variety of plant foods provides many vitamins, minerals and phytochemicals, which can help protect cells in the body from damage that can lead to cancer.

♦ Plant foods provide dietary fibre, which helps keep our digestive system working smoothly and probably also reduces our risk of bowel cancer.

Eating more plant foods

Enjoying a diet based around plant foods is probably easier than you think. A simple first step is to pay a bit more attention to what is on your plate. In the UK, meat tends to be the centre-piece of many of our main meals. A healthier approach is to base your meals around plant foods and then add a small amount of meat – we call this 'reshaping' your plate. Aim to fill at least two-thirds of your plate with vegetables, fruits, cereals or grains and then add one-third or less of lean meat, reduced-fat dairy, fish or poultry.



Fitting more plant foods into your diet is easy when you know how. Why not try some of these suggestions?

At breakfast

- ♦ Wholegrain cereals – look for those with no added sugar/salt
- ♦ Wholegrain toast with sliced banana
- ♦ Porridge

At lunch

- ♦ Wholegrain sandwiches with healthy fillings such as chicken, tuna or houmous
- ♦ Jacket potato with baked beans or salad
- ♦ Wholemeal pasta or wholegrain rice salad

At dinner

- ♦ Wholemeal pasta with a tomato and vegetable sauce
- ♦ Vegetable and chicken stir-fry with wholemeal noodles
- ♦ Kidney bean and lean beef chilli with brown rice, broccoli and green beans

A healthier approach is to base your meals around plant foods



As snacks

- ♦ Vegetable sticks or oatcakes with reduced fat houmous or salsa
- ♦ Fresh fruit
- ♦ A handful of dried fruits, nuts and seeds



Understanding the science: how plant foods can reduce our cancer risk

On page 2, we introduced the idea that our diet can help prevent cancer in two main ways – both by directly protecting our bodies and by helping us to manage our weight.

Both of these points apply to plant foods, which tend to be lower in energy density. This makes them a good choice for weight maintenance – see page 14 to find out more. They also contain substances like phytochemicals and fibre, which scientists believe help the body to protect itself against damage that can lead to cancer.

Phytochemicals

Vegetables, fruits, wholegrains and pulses contain a wide range of vitamins, minerals and other natural chemicals that have been connected to good health. There may be as many as 100,000 different phytochemicals in plant foods. Several act as antioxidants, which help to keep our bodies' cells

healthy. Not all plant foods contain the same mix of phytochemicals, so the best way to ensure you are benefiting from as many as possible is to eat a variety of different plant foods every day. One way to do this is to make sure your meals are colourful – create a rainbow of plant foods on your plate at every mealtime.

Fibre

Dietary fibre occurs naturally in plant foods. High intakes have been linked with a reduced risk of certain cancers such as bowel cancer. There is also limited evidence to suggest that fibre reduces the risk of cancer of the oesophagus. A high-fibre diet also reduces the risk of heart disease.



Preparing plant foods

The way in which we prepare and cook our plant foods can affect the benefits they bring to our diet. It's better to enjoy plant foods without adding extra fat to help keep the calories down.

Nuts, seeds, and vegetable oils

There is not enough evidence on the role that these foods may play in decreasing cancer risk to make a specific recommendation. However, nuts and seeds are valuable sources of fibre, essential fatty acids and vitamins and minerals. Though they are energy dense, and so should be eaten in moderation, they have not been linked to weight gain. Similarly, vegetable oils can be used for cooking in small amounts.



What about...?

Other plant foods

Sugar

There is no strong evidence to link sugar directly with cancer. We do know, however, that having too much sugar in our diets can lead to weight gain, which in turn increases the risk of cancer. To help maintain a healthy weight, it's advisable to limit the amount of sugar in your diet by choosing low energy-dense foods (see page 14).

There is only limited evidence which suggests that added sugar in foods may increase the risk of bowel cancer. Further research is needed before we are able to make any recommendations on this.

Top tips for eating well

- ◆ When planning your meals, think plant foods first. Once you've chosen these, you can then decide if you want to add some meat.
- ◆ Eat at least five portions of vegetables and fruits each day.
- ◆ Choose unprocessed cereals or grains such as wholegrain rice and wholemeal pasta. Try not to eat too many refined starchy foods such as products made from white flour. For example, white bread, white pasta, pizza and white rice.
- ◆ It's also good to limit our intake of energy-dense foods that are fatty or sugary such as confectionery, cakes, pastries, biscuits and other baked foods.



Dietary supplements – a quick fix for a healthy diet?

WCRF UK's Recommendation: Don't use supplements to protect against cancer

Vitamin and mineral supplements often promise to help keep us healthy, but they don't offer the same benefits as whole foods such as vegetables and fruits.

A balanced diet offers far better protection than supplements

What are supplements?

Nutrient-rich whole foods contain vitamins, minerals, fibre and other substances that are vital for good health. Some of these are available as supplements, usually in the form of a pill, capsule tablet or liquid – for example, vitamin C tablets.

Claims about the health benefits of dietary supplements have made them increasingly popular, but they are still the subject of scientific debate.

In relation to cancer prevention, supplements have varied and sometimes unpredictable effects – research has found some positive outcomes and also some negative ones:

- Our Second Expert Report found strong evidence that high-dose supplements of some nutrients can increase the risk of some cancers.
- It also found that high-dose supplements of other nutrients probably had protective effects for particular cancers. Higher-dose supplements may contain nutrients at many times the amount found in a healthy, balanced diet.

What is WCRF UK's advice?

Based on the findings of our Expert Report, WCRF UK advises not to use supplements to protect against cancer. Although some studies show that certain supplements may protect against some cancers, they have normally been tested in one particular group of people, so the benefits might not apply to the general population. The Expert Panel agreed that the best source of nourishment is food and drinks – not dietary supplements, where the balance of risks and benefits is not yet known.

Choosing a balanced diet including a wide variety of vegetables, fruits and other plant-based foods offers far better protection than supplements. Throughout the course of the day, you will get a range of vitamins, minerals and antioxidants at safe levels, and in combinations often not available in supplement form. What's more, a healthy diet has the added benefit of helping us to maintain a healthy weight.



Are supplements sometimes necessary?

There are occasions when supplements may be beneficial for particular groups of people. For example:

- All women of childbearing age intending to conceive a child should take a 400mcg folic acid supplement before conception and up to the 12th week of pregnancy.
- Pregnant women and nursing mothers should take a vitamin D supplement and possibly an iron supplement if their iron levels are low.
- Children between six months and five years could benefit from taking drops containing vitamins A, C and D, although children with a good appetite who eat a wide variety of foods may not need them.
- Frail older people who have low calorie needs may benefit from a low-dose, balanced micronutrient supplement.



- Older people should consider taking a vitamin D supplement, as should: people of Asian origin; people who rarely go outdoors; people who cover up all their skin when outdoors; those who don't eat meat or oily fish. If you want more advice on any of these situations, it is best to contact your GP.

Making less room for red meat

WCRF UK's Recommendation:

Limit consumption of red meats (such as beef, pork and lamb) and avoid processed meats

One of the most important parts of WCRF UK's Guidelines is limiting our intake of red meat and avoiding processed meat. Following this guideline doesn't mean that we need to give up animal foods altogether – foods like fish and lean poultry are healthy choices and are not linked to an increased risk of cancer.

Red meat and processed meat, though, are special cases. To reduce our risk of cancer, experts recommend that we have no more than 500g (cooked weight) a week of red meat like beef, pork or lamb. This is about 700-750g raw weight, as meat normally loses about a third of its weight when it is cooked.

We also recommend avoiding processed meat like ham and bacon, almost always.

So, how do you go about changing your diet to make this Guideline a way of life? Perhaps the first step is to look at the food you normally eat over a typical week and work out how much red and processed meat you are eating. You may find that you only need to make small changes to your diet – and remember that gradually reducing the amount of red and processed meat you eat will have benefits too. There are lots of suggestions for cutting down on red and processed meat in the 'Appetising alternatives' box (right).



1/3 (or less)
animal foods



2/3 (or more) vegetables,
wholegrains and pulses

A balancing act

The 'two-thirds plant foods' rule for filling your plate is a simple way to put WCRF UK's advice into practice.

Instead of thinking of meat as the focus of your meal, try to think of the wholegrains, vegetables and pulses that you plan to serve first, and think of your meat dish as a side dish to add extra flavour.

Making these changes will make room for more vegetables, fruits and other plant foods, making it easier to reach the 5 A DAY target. It can also help you to reduce the amount of red meat you are eating without feeling like you are missing out.

What are processed meats?

Processed meat is meat which has been preserved by smoking, curing or salting, or by the addition of preservatives. These foods include: ham, bacon, pastrami and salami, as well as hot dogs and some sausages.

Strong research links these foods to a higher risk of bowel cancer, which is why WCRF UK advises that we avoid eating them almost always. The good news is that choosing not to eat these foods can make a significant difference to our risk. Although most processed meat is red meat, until we know more about why these foods increase cancer risk, it's also sensible to avoid other processed meat, like 'bacon' made from poultry.



Red meat – how much a week?

We can still enjoy red meat in several meals a week and stay within the recommended limit. Here are some weekly meal plans that show how you could include red meat over the course of the week and consume less than 500g.

Week 1 – small portions of red meat in six main meals

- Shepherds pie with lamb, vegetables and lentils = 40g
- Beef and chickpea stew = 50g
- Lamb and kidney bean chilli = 50g
- Pork and vegetable stir fry = 60g
- Peppers stuffed with vegetables and pork = 50g
- Beef and vegetable fajitas = 80g

Total = 330g cooked red meat

Week 2 – medium portions of red meat in four main meals

- Spaghetti bolognese with minced beef = 140g
- Pork chop = 75g
- Medium steak = 145g
- Roast beef = 90g

Total = 450g cooked red meat

Week 3 – large portions of red meat in two main meals

- T-bone steak = 250g
- Large portion roast lamb = 150g

Total = 400g cooked red meat

Appetising alternatives

Try our handy hints to help you cut down on the amount of red meat you eat

- ♦ Keep several meals each week red-meat free.
- ♦ Serve lean poultry like skinless chicken or turkey in place of pork, beef or lamb.
- ♦ Replace some or all of the meat in stews, casseroles, chillis and pasta sauces with beans, chickpeas or lentils. They are filling, high in protein, full of flavour and low in fat.
- ♦ Try eating more fish – it's quick and easy to prepare. Opt for oily fish like salmon once a week, as well as low-fat fish like cod, haddock and plaice. Smoked and cured fish are often high in salt, so it's best not to eat these too often.

If you want to cut down on the amount of processed meat that you eat – or you want to avoid eating it completely – there are plenty of tasty alternatives

- ♦ Canned fish such as tuna, salmon and sardines are inexpensive and make great sandwich fillings. They keep well in the store cupboard too.
- ♦ Instead of salami or sausage, try using roasted vegetables, pine nuts, egg, spicy chicken or olives to top your pizza.
- ♦ Try homemade bean burgers, falafels or fishcakes instead of sausages.

What about...?

Other animal foods

Fish is a healthy choice for cancer prevention and we should aim to eat it more regularly. Some limited evidence has shown that it may help to protect against bowel cancer.



Eggs are a good source of protein and can play an important part in a healthy diet when eaten in moderation. They are not linked to an increased risk of cancer.



Poultry such as chicken or turkey can make a nutritious addition to our diets. Keep the fat content lower by opting for skinless meat when possible.



Dairy foods – some evidence shows that foods rich in calcium, such as milk, may protect against bowel cancer, while other evidence shows that these foods may increase the risk of prostate cancer. For this reason, WCRF UK has not made a specific recommendation about dairy foods, although it's important to mention that they are a good source of several nutrients that help keep our bodies healthy – particularly our bones. Opt for lower fat options like semi-skimmed or skimmed milk, and reduced-fat cheese, whenever possible.



Meat from wild animals such as rabbit and venison, has a different composition to that of animals that are bred for meat, and it also tends to be leaner. There is no evidence to show that these foods have any affect on our cancer risk.



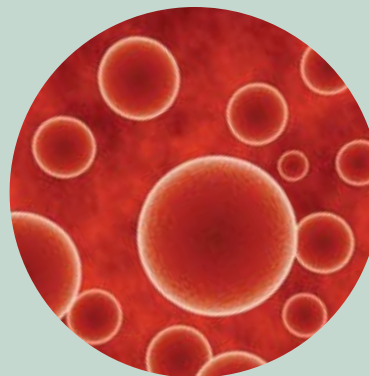
Do cooking methods count?

Baking, boiling and steaming are all healthy cooking methods. Some research shows that other cooking methods, which involve cooking foods at high temperatures, may alter the make-up of foods, especially meat. However, there is only limited evidence that eating burned or charred foods increases the risk of some cancers.

Understanding the science: what links red meat and bowel cancer?

Often, the first step in connecting a particular food to an increased cancer risk is made through 'population studies', which look at different groups of people and record their food and lifestyle habits. Scientists then monitor which people go on to develop diseases such as cancer, and compare their diets and lifestyles with those who did not develop the disease. Some of these studies found that people who eat more red and processed meat tend to have higher rates of bowel cancer.

The next step is to explain *how* these foods increase our chances of developing bowel cancer. Scientists have done this by investigating the effect of red and processed meat on cells in our bodies. These types of studies were included in our Second Expert Report, the results of which led to our Recommendation to limit our consumption of red meat.



People who eat more red and processed meat tend to have higher rates of bowel cancer

What's the theory?

One theory to explain the link between red meat and bowel cancer relates to a red-coloured compound called haem. This compound has been shown to damage the lining of the colon, making it more likely that cancer will develop. Red meat can also stimulate the gut to produce cancer-causing substances called N-nitroso compounds, which can damage DNA in our cells.

Processed meats, like bacon and ham, may produce higher levels of N-nitroso compounds than fresh red meat. This may be why the evidence linking them to cancer is stronger.

Opting for lower energy-dense foods

WCRF UK's Recommendation: Avoid sugary drinks. Limit consumption of energy-dense foods (particularly processed foods high in added sugar, or low in fibre, or high in fat)

What are energy-dense foods?

When we talk about the energy density of a particular food we are talking about the number of calories it provides for its weight (usually per 100g). Foods high in energy density have more than about 225-275 calories per 100g.

What have energy-dense foods got to do with cancer?

Scientific evidence shows that diets that are made up of too many energy-dense foods, particularly processed foods that are often high in sugar or fat, increase the risk of overweight and obesity. It's fine to eat some energy-dense foods but try not to make them the basis of your diet.

Lower energy-dense foods have less fat and/or sugar and they contain plenty of fibre and water that helps to keep us feeling fuller for longer. What's more, some types of lower energy-dense foods, such as vegetables, fruits and other foods rich in fibre, also offer more direct protection against some cancers.

We know that being overweight increases the risk of cancer. Therefore, it's important to take steps like choosing lower energy-dense foods to help us achieve 'energy balance' – when our intake of energy matches the amount we use up each day. Being more physically active is another important way to help us balance our energy intake and expenditure, and so maintain a healthy weight and decrease our risk of cancer.

A sweet fix?

Although sugary drinks can't be classed as energy dense because they contain a lot of water, research shows that they can contribute to weight gain if consumed regularly – and watch out for 'super-sized' portions too. Sugary drinks include fizzy drinks like cola and lemonade, as well as cordials and squashes like blackcurrant juice drinks. Water is the best choice, and unsweetened tea and coffee are also good options (aim to limit coffee to no more than four cups a day).

Natural fruit juice counts as one of our recommended 5 A DAY, but it does contain a lot of sugar, so it's best not to drink more than one glass a day.

Foods high in energy density have more than about 225-275 calories per 100g

This is an example of a diet based on low energy-dense foods:

Breakfast

Porridge made with skimmed milk

Mid-morning snack

Banana

Lunch

A large bowl of vegetable soup with wholegrain bread
Apple

Afternoon snack

Vegetable sticks with guacamole

Dinner

Grilled chicken, wholegrain rice, broccoli and carrots
Fruit salad with low-fat yoghurt

How to spot energy-dense foods

Follow our top tips to help you recognise energy-dense foods

- In general, the closer a food is to its natural state, the less likely it is to be energy dense. Most plant foods are low in energy density because they contain plenty of water and fibre.
- Fast foods, ready meals and confectionery tend to be high in energy density.
- Foods fried in fat or oil will also be higher in energy density.

Here are some examples:

High energy-dense foods

contain more than about 225-275 kcal/100g. They include fast foods, cakes, biscuits, crisps, confectionery, butter and other spreads.

Medium energy-dense foods

Bread, lean meat, poultry and fish are all medium energy-dense foods. They tend to contain around 100-225 kcal/100g.

Low energy-dense foods

include cooked cereals, like brown rice and wholemeal pasta, and pulses, like lentils and beans. They tend to contain less than about 60-150 kcal/100g. Most vegetables, fruits, roots and tubers, like boiled potatoes, are also low in energy density. They contain around 10-100 kcal/100g.

Some energy-dense foods, like vegetable oils, nut and seeds, contain beneficial nutrients and are an important part of a healthy, balanced diet. We tend to consume these foods sparingly, and they are not linked to weight gain.

High energy density



Low energy density

Cutting down on processed foods

What are processed foods?

Almost all the food we eat has been 'processed' in some way to make it easier, or more appealing, for us to eat. Even picking fruit from a tree could be described as 'a process'!

So, when we recommend avoiding processed foods we really mean foods that have been manufactured or *heavily* processed – like chocolate, crisps, biscuits, cakes and fast foods such as hamburgers, fried, breaded chicken or chips. Salted and cured meat, like bacon, ham and salami, are also processed foods.

When these types of food are made, a lot of the water, fibre and some of the nutrients are taken away, and extra fat, salt and sugar are often added. This makes the foods more energy dense and less nutritious. Eating just a small amount of these foods can provide a lot of calories without making us feel full.

In general, the healthiest foods are those that have only been minimally processed, such as vegetables, fruits, wholegrain cereals and wholemeal bread – as well as pulses such as lentils and beans.



Take it with a pinch of salt?

WCRF UK's Recommendation:
Limit consumption of salty foods and foods processed with salt (sodium)

What is salt?

Salt is a preservative and flavour enhancer used in nearly all processed foods. We recommend limiting the consumption of salty foods and foods processed with salt (sodium) because consuming too much is bad for our health. As well as being linked to high blood pressure, our Expert Report concluded that salt and salt-preserved foods are also probably a cause of stomach cancer.

How much is too much?

Our daily intake of salt should be less than 6g (2.4g sodium) – we actually need much less than this. Six grams of salt is approximately one level teaspoonful – this teaspoonful should include not only the salt you may add to food but also the salt that is 'hidden' in foods such as bread, breakfast cereals, soup, cooking sauces, ready meals and other processed foods. About 75 per cent of the salt we eat is already in the food we buy, so eating these foods less often and choosing lower-salt varieties will help keep your intake within the recommended limit.

Unprocessed foods are generally low or very low in salt, so try replacing processed foods with more fresh, whole foods and homemade dishes to reduce the amount of salt you consume. Fresh and dried herbs can be used to add flavour in place of salt, so keep your store cupboard well stocked!

Did you know?

The flavour of salt is disguised by sweetness, which is why you probably don't notice it in foods such as biscuits and cereal bars even though these foods are often high in salt.

In contrast, saltiness is enhanced by bitter and sour flavours, so why not try using less salt in your cooking and adding a squeeze of lemon or lime to make it taste stronger.

The alcohol-cancer link

WCRF UK's Recommendation: *If consumed at all, limit alcoholic drinks to 2 for men and 1 for women a day*

Many people have heard that drinking a glass of alcohol a day is good for our health, but for most of us this is not really the case. While small amounts of alcohol can decrease the risk of heart disease, the benefits only outweigh the risks in those most at risk of heart disease such as men aged over 40 and postmenopausal women.

Drinking alcohol raises our risk of several common cancers including those of the mouth and throat, oesophagus, breast, liver and bowel. So, if you're concerned about reducing your risk of cancer, avoiding or limiting your intake of alcohol is a good place to start.

Know your limit

WCRF UK recommends that, if consumed at all, we should limit alcoholic drinks to 2 for men and 1 for women a day. But how much is a drink? As a rough guide, a 'drink' contains about 10-15 grams of alcohol, so a drink is roughly the same as:

- half a pint of normal strength (3-5% ABV*) beer, lager or cider
- one 25ml measure of spirits (40% ABV*) such as vodka or whisky
- one small (125ml) glass of wine (12-13% ABV*)

Alcoholic drinks vary quite a lot in terms of their size or strength, so a good rule of thumb is to opt for the smallest serving size available, and to aim to stop drinking after two drinks if you are a man, or after one drink if you are a woman. Saving up our daily 'alcohol allowance' and drinking more at the weekend isn't a good idea either. Research shows that binge drinking is particularly harmful to our health.

*ABV = Alcohol by volume



Social drinking

In some social situations, choosing not to drink alcohol isn't the easy option. But there are some simple tricks you can use to lower your alcohol intake without feeling like you are missing out on all the fun:

- **Put your glass down between sips**
You'll be less likely to drink without realising.
- **Wait until you've finished a drink before refilling your glass**

This can help you keep track of how much you are drinking.

- **Alternate alcoholic drinks with soft drinks**

This will help you cut down on alcohol and keep your body hydrated.

- **Go halves!**
Choose a drink that's half soft drink, half alcoholic, such as a spritzer or a shandy.
- **Keep a drinks diary for a week**
If you're drinking alcohol most days of the week, try to cut down.

Alcohol and calories

Have you thought about the effect drinking alcohol could have on your weight? Alcohol is quite high in calories, so cutting down could be a simple way to help maintain a healthy weight or even lose weight.

Quick and easy recipes

Put the ideas in this booklet into practice and enjoy healthy eating with these family-friendly recipes

Madeover Macaroni Cheese

(serves 2, 480 kcals, 11.3g fat, 2.4g salt and 1 of your 5 A DAY per serving)

An updated version of this family favourite, this recipe uses wholegrain pasta and contains one portion of your 5 A DAY. To give the recipe a tropical twist, try stirring in a little chopped tinned pineapple to the sauce just before serving.

Ingredients

- ♦ 120g (5oz) wholegrain macaroni or other wholegrain pasta such as fusilli
- ♦ 1 tablespoon polyunsaturated margarine
- ♦ 20g (1oz) plain wholegrain flour
- ♦ 250ml (8½ fl oz) skimmed milk
- ♦ 60g (2oz) half-fat Cheddar-type cheese, grated
- ♦ 1 x 195g (8oz) can sweetcorn, drained or 160g (6oz) frozen sweetcorn
- ♦ Good pinch of mustard powder
- ♦ Freshly milled black pepper
- ♦ Sprig of parsley, to garnish

Method

- 1) Cook the wholegrain pasta in plenty of boiling water until it is just tender.
- 2) Meanwhile, melt the margarine in a pan, stir in the flour and gradually add the milk, a little at a time, stirring all the time.
- 3) Mix about two-thirds of the grated cheese into the sauce and allow it to melt.
- 4) Add the sweetcorn to the sauce and season with the mustard powder and freshly milled black pepper. Remove from the heat.
- 5) Drain the macaroni thoroughly and add it to the sauce, stirring to coat.
- 6) Serve on a warmed plate, sprinkle with the remainder of the cheese and garnish with a sprig of parsley.



Stovies

(serves 2, 276 kcals, 5.0g fat, 2.1g salt and 1.5 of your 5 A DAY per serving)

A great recipe for using up the leftovers from a Sunday roast, particularly when we now know that we should be trying to reduce our serving size of meat and fill our plate with plenty of vegetables instead. Make your standard roast cover a least two meals by using this traditional recipe to make 'a little go a long way'.

Ingredients

- ♦ 1 tablespoon oil
- ♦ 1 large onion, chopped
- ♦ 2 large potatoes, peeled and chopped into large chunks
- ♦ 1 large carrot, diced
- ♦ 200ml (7fl oz) low-salt vegetable stock, or the same quantity of leftover gravy topped up with water
- ♦ Freshly milled black pepper
- ♦ 100g (4oz) frozen peas
- ♦ Small portion of cold roast red meat (60g (2oz) is plenty), chopped into small cubes

Method

- 1) Heat a heavy-based saucepan, add the oil and onion and brown lightly.
- 2) Add the chunks of potato and diced carrot and brown the mixture a little more.
- 3) Add the stock or gravy to just cover the potatoes. Add a little freshly milled black pepper, cover with a lightly fitting lid and cook until the potatoes are nearly done.
- 4) Add the frozen peas and chopped meat. Bring back to the boil and simmer for 3-4 minutes until the peas are cooked and the meat is piping hot.
- 5) Serve on a warmed plate with a little extra black pepper to taste.

Chickpea and Bean Casserole

(serves 2, 213 kcals, 4.7g fat, 0.9g salt and **3 of your 5 A DAY** per serving)

A wholesome meal in a bowl, full of flavour as well as plenty of fibre, and packed with essential nutrients too. You can change the variety of bean depending on which you can get easily in your local shops. Experiment and find your favourite!

Ingredients

- ◆ 4 small baby potatoes
- ◆ ½ tablespoon olive oil
- ◆ 1 small onion, peeled and chopped
- ◆ 1 clove garlic, crushed
- ◆ 1 teaspoon paprika
- ◆ 1 x 400g (16oz) can chopped tomatoes
- ◆ ½ teaspoon dried mixed herbs
- ◆ 1 large carrot, peeled and chopped into batons
- ◆ ½ x 410g (16oz) can chickpeas, rinsed and drained
- ◆ ½ x 410g (16oz) can cannellini beans, rinsed and drained
- ◆ Freshly milled black pepper

Method

- 1) Place the potatoes in a small saucepan, cover with cold water, bring to the boil and simmer for 5 minutes.
- 2) Meanwhile, in a medium saucepan, measure out the olive oil and put on a medium heat. Add the chopped onion and cook, stirring, until transparent.
- 3) Add the garlic and paprika and cook for 1 minute, stirring.
- 4) Add the chopped tomatoes, mixed herbs and baby potatoes, stir and bring to simmering point. Cover and simmer for 10 minutes.
- 5) Add the carrots, chickpeas, beans and some freshly milled black pepper. Bring back to simmering point and simmer with the lid off for a further 8 minutes, until the carrots and potatoes are just tender and the sauce has thickened slightly, stirring occasionally.
- 6) Taste the sauce and season with extra black pepper if necessary. Serve on warmed plates, ensuring there are a couple of potatoes in each portion.



Fragrant Thai Chicken with Brown Rice

(serves 2, 398 kcals, 11.7g fat, 2.6g salt and **2 of your 5 A DAY** per serving)

A mouth-watering chicken dish with a touch of the orient, flavoured with lemon grass, coriander and fresh ginger. Full of flavour, and served with nutritious brown rice, it makes a lovely meal for any occasion.

Ingredients

- ◆ 100g (4oz) brown rice
- ◆ 1 teaspoon vegetable oil
- ◆ 3 spring onions, chopped
- ◆ 1 large chicken breast (175g/7oz), sliced
- ◆ 1 cm (½") piece of fresh root ginger, peeled and grated
- ◆ Finely grated zest of 1 lime
- ◆ 50 ml (2fl oz) reduced-fat coconut milk
- ◆ 70 ml (3fl oz) low-salt chicken stock
- ◆ 2cm (1") piece fresh lemon grass, finely sliced
- ◆ Small bunch coriander, chopped
- ◆ 6 baby sweetcorn, halved lengthways
- ◆ 20 green beans
- ◆ 1 red chilli, finely sliced (optional)
- ◆ Coriander leaves and lime wedges to garnish

Method

- 1) Cook the brown rice following the instructions on the packet.
- 2) Meanwhile, heat the oil in a large frying pan and sauté the chicken until sealed on all sides.
- 3) Add the ginger, lime zest, coconut milk, chicken stock, lemon grass and coriander. Heat until almost boiling. Cover and simmer gently over a low heat for 10 minutes.
- 4) Add the baby sweetcorn, spring onions and green beans and simmer for a further 8 minutes, until the chicken is cooked and the vegetables are just tender.
- 5) Serve on the rice, sprinkled with the chopped red chilli (if using), coriander leaves and lime wedges on the side.



Salmon and Asparagus Parcel

(serves 2, approximately 300 kcals, 17g fat, 0.8g salt and **1 of your 5 A DAY** per serving)

A super recipe that tastes as impressive as it looks. It's great when entertaining, as you can prepare it until the end of step 4, then place it in the fridge until you are ready to cook, meaning you don't have to spend too long in the kitchen once your guests have arrived.

Ingredients

- ♦ 4 sheets filo pastry
- ♦ 1 teaspoon low-fat spread, melted
- ♦ 2 medium salmon fillets
- ♦ 6-10 asparagus spears
- ♦ Freshly milled black pepper
- ♦ 1 rounded tablespoon half-fat soft cheese

Method

- 1) Preheat the oven to Gas Mark 5/190°C/375°F.
- 2) Line a baking sheet with non-stick baking parchment or Teflon sheet.
- 3) Brush two of the filo pastry sheets with a little of the melted low-fat spread. Then add another layer of pastry to each buttered sheet. Brush the second layers with low-fat melted spread. Place the pieces of layered pastry side-by-side on the baking sheet.
- 4) Place a salmon fillet in the centre of each of the filo sheets, on the diagonal. Then place 3-5 asparagus spears on top of each of the fillets, add some freshly milled black pepper and top with the half-fat soft cheese.
- 5) Fold the sides of the pastry over the fillet to create a 'wrap' around the salmon and press the ends together. Brush with the last of the melted low-fat spread.
- 6) Bake for 20 minutes, or until the pastry is crisp and golden.
- 7) Serve with plenty of vegetables or a side salad.



Tutti Frutti Surprise

(serves 2, 159 kcals, 5.3g fat, 0.3g salt and **2 of your 5 A DAY** per serving)

A deceptively simple dessert that not only tastes delicious, but also contains one of your portions of fruit for the day. Try out different types of fruit, using varieties in season whenever possible for maximum flavour.

Ingredients

- ♦ 2 pieces fresh fruit (about 160g/6oz in total), peeled and chopped into small pieces. Alternatively, use the same weight of small fruits like raspberries or strawberries, or tinned fruit salad in natural juice, drained
- ♦ 1 x 150g (6oz) tub fat-free Greek yoghurt
- ♦ 2 tablespoons of half-fat crème fraîche
- ♦ 8 small amaretti biscuits

Method

- 1) Place the amaretti biscuits in a plastic food bag and crush with a wooden spoon or rolling pin.
- 2) Blend the fat-free Greek yoghurt and half-fat crème fraîche in a small bowl and stir in the crushed amaretti biscuits.
- 2) In 2 tall glasses, add some of the chopped fruit, spoon over the yoghurt mixture, then add some more fruit and repeat, finishing with the yoghurt mixture.
- 3) Chill and serve, decorated with a sprig of mint or a slice of fruit.



WCRF UK's Recommendations for Cancer Prevention

1. Be as lean as possible without becoming underweight
2. Be physically active for at least 30 minutes every day
3. Avoid sugary drinks. Limit consumption of energy-dense foods (particularly processed foods high in added sugar, or low in fibre, or high in fat)
4. Eat more of a variety of vegetables, fruits, wholegrains, and pulses such as beans
5. Limit consumption of red meats (such as beef, pork and lamb) and avoid processed meats
6. If consumed at all, limit alcoholic drinks to 2 for men and 1 for women a day
7. Limit consumption of salty foods and foods processed with salt (sodium)
8. Don't use supplements to protect against cancer

Special Population Recommendations

9. It is best for mothers to breastfeed exclusively for up to 6 months and then add other liquids and foods
10. After treatment, cancer survivors should follow the Recommendations for Cancer Prevention

And, always remember – do not smoke or chew tobacco

WCRF UK's healthy eating and lifestyle information is aimed at the general population and is not intended to influence individuals who are following special diets (on medical advice) or who have special dietary or exercise needs. The information contained in WCRF UK's education publications relates to the prevention of cancer. WCRF UK is not engaged in giving medical advice. For advice in specific cases, please consult your doctor.

About WCRF UK

WCRF UK is the principal UK charity dedicated to the prevention of cancer through the promotion of healthy diet and nutrition, physical activity and weight management. WCRF UK is committed to providing cancer research and education programmes which expand our understanding of the importance of our food and lifestyle choices in the cancer process.

By spreading the good news that cancer can be prevented, WCRF UK hopes that many thousands of lives will be saved. The education and research programmes of WCRF UK are funded almost entirely by donations from the public.

This booklet gives information based on WCRF UK's Recommendations for Cancer Prevention developed from the Expert Report: *Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective* (2007). The Report, produced by WCRF/AICR, is the largest study of its kind ever published and its Recommendations are based on the most comprehensive review of all the available evidence. WCRF UK is committed to interpreting scientific research in the field of food, nutrition, physical activity and cancer prevention and to translating the results into meaningful and practical advice for the public to follow.

