

Red meat is often seen as the star of a meal but, by cutting down on red and processed meat, you can reduce your risk of cancer.

World Cancer Research Fund recommends:

LIMIT CONSUMPTION OF RED MEAT
(SUCH AS BEEF, PORK AND LAMB)
AND AVOID PROCESSED MEAT.



What is red meat?

By red meat we mean beef, lamb, pork (despite its colour) and goat.

There isn't enough evidence about other red-coloured meats, including game – like quail and venison – for us to say whether they affect cancer risk, so we don't make specific recommendations about these.

What is processed meat?

Processed meat is red meat that has been smoked, cured or had salt or chemical preservatives added rather than simply cooked or reformed (like most burgers or sausages, which are just minced meat with added herbs and rusk).

Processed meat includes ham, bacon, some sausages, salami, chorizo, pepperoni and frankfurters.

There isn't enough evidence on smoked fish or processed poultry, like turkey slices, to make a recommendation. However, limiting intake of these foods is advisable.

How do I spot processed meat?

Looking for nitrites or nitrates in the ingredients list on the label of a meat product is the easiest way of checking if it has been 'processed'. Essentially, anything smoked or cured counts, and a bright pink colour is a good indicator.

Red and processed meat and cancer risk

There is strong evidence that eating more than 500g (cooked weight) red meat per week increases the risk of bowel cancer. This is equal to 700–750g uncooked or raw meat. Eating less than this does not significantly raise cancer risk.

However, the research on processed meat shows that even eating a small amount on a regular basis increases bowel and stomach cancer risk. That's why we advise avoiding processed meat whenever possible. Processed meat can also be higher in salt and fat compared to fresh red meat.

Bowel cancer is the fourth most common cancer in the UK.

In 2013, 42,222 new cases of bowel cancer were diagnosed.

Nearly half of these cases – around 19,000 a year – could be prevented if we all made healthy lifestyle choices, including eating less red meat and avoiding processed meat.

How do red and processed meat cause cancer?

Researchers are still investigating how red meat causes cancer. One possible way involves a compound called haem, which contains iron and gives red meat its colour. Haem has been shown to damage the lining of the bowel.



We also know that when we eat red meat, chemical compounds called nitrosamines are formed, which are known to damage the DNA in our cells, which can cause cancer.

As well as being made from red meat, processed meat also contains added nitrites and nitrates, which are also converted to nitrosamines when we eat them.

Why is some red meat OK?

Red meat is a good source of nutrients such as protein, iron, vitamin B12 and zinc so can be eaten as part of a healthy balanced diet. However, eating a varied diet that contains less red meat can provide you with all the vitamins and minerals you need.

What can you eat instead?

Red meat is just one of many protein sources available. Here are some healthier alternatives you could choose from:

- **Non-oily fish** like cod, canned tuna (in spring water) and **lean poultry**, such as chicken and turkey (without skin), are protein-rich, low-calorie alternatives.
- **Oily fish** like salmon, fresh tuna, trout, sardines and mackerel, are also a good source of protein as well being rich in healthy omega-3 fats.
- **Eggs, reduced-fat dairy** and **meat substitutes**, like beans, tofu and Quorn, are also tasty and versatile alternatives to meat.

How to stick within the limit



To eat less than 500g (cooked weight) red meat a week, you could have an 80g portion (cooked) – about the size of a pack of cards – in six meals a week.

Here is an example of how you could have four meals a week containing medium-sized portions of red meat and still stick within the recommendation:

SPAGHETTI BOLOGNESE WITH MINCED BEEF

140g (about 200g raw weight)

MEDIUM STEAK

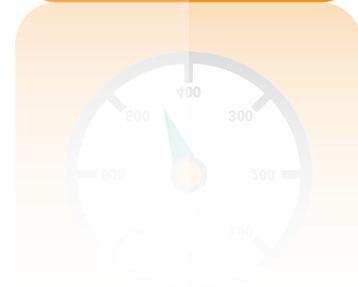
145g (about 210g raw weight)

ROAST BEEF

90g (about 130g raw weight)

PORK CHOP

75g (about 110g raw weight)



Top tips for cutting down on red meat

To reduce the amount of red meat you eat; try to think about your meals in a new way. As well as thinking about portion sizes, here are some tips for when planning a meal:



Choose your vegetables and wholegrain foods first (such as brown rice or pasta; or wholemeal bread), rather than planning your meal around meat.



Try to have some meat-free meals using beans, peas or lentils. Did you know that a portion of these counts towards your 5 A DAY?



Make red meat go further by adding some beans, chickpeas or mushrooms to bulk out stews, chillies and pasta sauces. They have a meaty texture and are just as filling.



Swap beef mince for turkey or Quorn – even if you do half and half, you'll be eating less red meat and cutting the calories. Boost the flavour with onions, garlic, herbs and spices.



Restaurant portions can be quite large and often the meat served is not very lean. **When eating out, why not try poultry, fish or meat-free options** that you wouldn't usually cook yourself?

Top tips for cutting out processed meat

These tips can help you avoid processed meat but also keep the flavour in your food:



Use smoked paprika instead of chorizo for the flavour kick in your cooking.



Instead of salami or pepperoni, add flavour or heat to your pizza using **spicy chicken, roasted vegetables, chilli or jalapeño peppers**.



Rather than ham in your sandwich, try **hard-boiled eggs, canned tuna (in spring water), reduced-fat cheese or low-fat hummus with roast vegetables**. Add rocket or spring onion to boost the flavour.



If you enjoy a full English breakfast, have it as an occasional treat. And when you do, try swapping your bacon for fresh sausages (vegetarian ones would be even better), and adding more grilled mushrooms and tomatoes.

For lots of simple, tasty recipes to help make cutting down on red meat easier, visit www.wcrf-uk.org/recipes

Did you know that about a third of the most common cancers are preventable through a healthy diet, weight management and physical activity? Visit our [website](http://www.wcrf-uk.org) for advice to help reduce your cancer risk.