

How much red and processed meat can be eaten as part of a balanced diet?



Meat is eaten by almost 98% of people in the UK¹, with red meat a popular choice and a valuable source of protein, iron, zinc, B vitamins, vitamin D, selenium and iodine. These nutrients are acknowledged to play an important role in wellbeing yet the public is often advised to ‘cut down’ on red meat for reasons of health or to protect the environment. What does this mean for our diets and how much red meat is the right amount?

Types of meat

Red meat is often categorised as fresh/unprocessed or processed and this can cause some confusion.

The World Health Organisation² defines red meat as unprocessed mammalian muscle meat, i.e. beef, veal, pork, lamb, mutton, horse, and goat meat (both minced and frozen). British sausages and burgers would be included in this category as they are made from fresh meat with minimal processing.

Processed red meat

Bacon, ham, salami, prosciutto, beef jerky, corned beef, carpaccio, frankfurters and most sausages sold in mainland Europe.

Fresh red meat

Any beef, pork, lamb or goat meat that has not been cured or preserved to extend shelf life. Includes mince, fresh sausages, burgers and kebabs, as well as meat pies and ready meals.

The preservatives used in most retail sausages are based on sulphates or sulphites and have not

been linked with cancer. In 2010, the Scientific Advisory Committee on Nutrition said: “no data have been identified that support a hypothesis that sulphate preservatives used in preserved meats could be linked to CRC”.

Processed meat is defined as meat that has been transformed through salting, curing, fermentation, smoking, or other processes to enhance flavour or

¹ Bates B et al. (2014) National Diet and Nutrition Survey, years 1-4. London: FSA/PHE.

² <http://www.who.int/features/qa/cancer-red-meat/en/>

improve preservation. European sausages would be included in this category as they typically undergo curing or smoking which alters the meat and extends the shelf life.

Red meat benefits

Meat and meat products contribute around 30% of protein to the average UK diet, 25-30% of vitamin D, zinc and selenium, as well as 10-20% of other vitamins and minerals³. Not only this, the types of iron and zinc in red meat are better absorbed than those found in any other dietary sources. Red meat 'haem' iron is nearly three times better absorbed than the 'non-haem' iron found in spinach, lentils or supplements according to the Scientific Advisory Committee on Nutrition which advises the UK government⁴.

Iron is an important public health issue as 30% of women and nearly half of teenage girls have inadequate iron intakes (below the minimum needed for health), while low body iron stores have been noted in around a fifth of girls and one in ten women. Low blood haemoglobin is seen in one in ten women and girls and is a risk for iron deficiency anaemia – a condition linked to breathlessness, poor concentration and fatigue⁵.

Official advice on meat

Public Health England and other UK health bodies recommend that we eat up to 500 grams of cooked red and processed meat per week, equating to around 750 grams of raw meat per person⁶. People who eat more than 90 grams a day (600 grams a week) are recommended to reduce their intake.

This 500 gram limit was selected to ensure that people get enough iron and zinc in the diet, while taking a precautionary approach to reduce the risk of colo-rectal cancer. In mainly US studies, this type of cancer has been associated with very high intakes of meat, as well as low fibre diets, physical inactivity, alcohol, smoking and age.

³ Bates B et al. (2014) National Diet and Nutrition Survey, years 1-4. London: FSA/PHE.

⁴ <https://www.gov.uk/government/publications/sacn-iron-and-health-report>

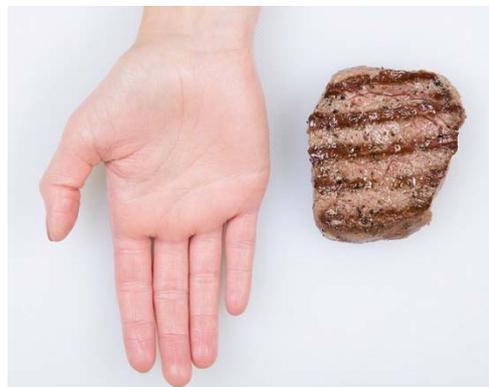
⁵ Bates B et al. (2016) National Diet and Nutrition Survey, years 5-6. London: FSA/PHE.

⁶ <http://www.nhs.uk/Livewell/Goodfood/Pages/red-meat.aspx>

Within the 500 gram limit, the UK does not give any advice on what proportion of meat in the diet should be processed or unprocessed meat. However, other bodies, such as the World Health Organisation, advise that processed meat consumption should be minimised. This is because of concerns that high amounts of the nitrate and nitrite preservatives used in processed meats could be linked to colo-rectal cancer, although this remains speculative.

How much should I eat?

If you enjoy eating red meat, stick to the recommended maximum of 500 grams a week (cooked meat) and try to choose lean cuts as these are lower in fat and calories. Processed meats should be kept for an occasional treat and eaten in small amounts, e.g. one or two rashers of bacon or thin slices of ham. Serve meat with plenty of vegetables.



Most people find it difficult to estimate correct portion sizes so a useful guide is to use your hand or a deck of cards to check that you are eating the right amount of meat. This would equate to around 70-100 gram of meat, giving you the option to eat five portions of red meat a week. For minced beef, estimate 130 grams raw meat per person in the recipe.

Menu ideas for **five a week** include:

	Breakfast	Lunch	Evening meal
Monday	Cereal with fruit	Vegetable soup and a roll	Spaghetti bolognese with tomato, peppers and celery
Tuesday	Toast with egg and mushrooms	Wholegrain baguette with ham and salad	Salmon with mashed potatoes and sautéed cabbage
Wednesday	Cereal with fruit	Chicken salad	Pork stir fry with beansprouts, peas, broccoli and rice

Thursday	Natural yogurt with fruit	Roll with hummous and salad	Haddock with boiled potatoes and green beans
Friday	Toast with jam and a piece of fruit	Turkey salad wrap	Chick pea and cauliflower curry with rice
Saturday	Porridge with raisons	Vegetable soup and a roll	Leg of lamb steaks with baked potato and corn on the cob
Sunday	2 sausages , poached egg, tomato	Roast chicken, boiled new potatoes and carrots	Omelette with vegetables and crusty bread

In conclusion

Red meat is a healthy choice rich in important vitamins and minerals which can be enjoyed as part of a balanced diet. Most people in the UK eat red meat regularly. By aiming for up to 500 grams per week of cooked meat, and keeping portions to the size of your hand or a deck of cards, you can enjoy five red meat meals a week.

Please visit www.meatandhealth.com for more information.