

Red meat and bowel cancer



Bowel cancer is one of the most common cancers in Western countries.

It is the third most common cancer in both men and women. Overall, 94% of people diagnosed with bowel cancer are aged 50 or over and 58% are aged 70 or over, suggesting that increasing age is one of the main risk factors for its development. Various lifestyle-related factors are also thought to have a significant impact on the risk of bowel cancer.

Smoking, physical inactivity, excessive body weight, alcohol consumption and high intake of red and processed meat have all been the focus of many studies in this area. However, other than smoking, it has been difficult to tease out the exact impact of individual diet and lifestyle factors. This is because they are difficult to measure and tend to 'cluster' together. As a result it is perhaps best that they are considered collectively as factors which can be modified to help reduce the risk of bowel cancer.

What do we know?

Establishing a link between any dietary factor and cancer is difficult. Cancer develops over a long period of time so it is not possible to assess any immediate effects of certain foods on the risk of cancer.

Some studies have linked high red meat intakes with increased risk of bowel cancer but the effect size is relatively small, compared with, for example, the impact of smoking on lung cancer risk. There are also limitations with these studies. For example, some measure meat consumption at intervals over a period of time usually many years before the disease is diagnosed. The studies often rely on frequency questionnaires and do not consistently define the types of meat or the amounts actually consumed. Most studies fail to account for other dietary aspects that influence cancer risk, e.g. fibre or vegetable intakes which lower risk. As a result the findings are not clear cut.

The UK Department of Health has concluded that eating a lot of red and processed meat probably increases your risk of bowel cancer. However, it is important to remember that red and processed meat is only one of many factors which may increase our risk of cancer and that it is the overall balance of our diet that is most important.

Risk factors vary between men and women and are affected by our family history, body fatness and age. Also as we are living longer our chances of developing bowel cancer increase. All this makes it impossible to identify one food group, such as red meat, as a cause. Indeed, no direct cause between red and processed meat and bowel cancer has ever been established.

What can I do to reduce my risk of bowel cancer?

Choosing a healthier lifestyle is the best way of reducing risk of bowel cancer. This includes:

- Stopping smoking
- Maintaining a healthy body weight
- If you drink alcohol, doing so within recommended limits
- Eating healthily, including consuming plenty of fruit, vegetables and fibre (roughage)
- Being active

Recommendations for red meat intake

The Department of Health highlights that red meat is a good source of protein, and vitamins and minerals such as iron, selenium, zinc and B vitamins. It is also pointed out that red meat is one of the main sources of vitamin B₁₂, which is only found in foods from animals (e.g. meat, milk) or some microbes (e.g. fermented foods).

For these reasons the Department of Health does not recommend we exclude meat from the diet. However, they recommend that we choose healthier meats, such as lean cuts of meat, leaner mince and lower fat/lower salt processed meat products, where possible. They also recommend that we consider our frequency of consumption and portion size.

How much red meat do we consume in the UK?

Overall our intake of red meat in the UK diet has fallen during the last few decades. In the UK the average total red meat consumption for men is around 84 g per day

while for women, it is around 47 g per day. This gives an average of 65 g per day for all adults.

Those who eat more than 90 g are considered to have a relatively high intake, compared with the average. It is recommended that these people cut down, so that their consumption is no more than 70 g per day, i.e. closer to the current average.

According to UK dietary surveys, 4 in 10 men and 1 in 10 women eat more than 90 g of red and processed meat a day. Therefore, most people do not need to make any changes to their present consumption patterns in order to achieve the recommendation.

More than 90g of cooked weight per day is considered to be a large amount. Cooked meat weighs about 70% of its uncooked weight, mainly because it contains less water. So 90g of cooked meat is equivalent to about 130g of uncooked meat. Department for Health 2011.

Examples of a 70 g portion of meat are:

- one medium portion shepherds pie
- two standard beef burgers
- one lamb chop
- two slices of roast lamb, beef or pork
- three slices of ham

As a further guide: 1 rasher of bacon 25 g, 1 slice of ham 23 g, 1 small grilled sausage 20 g, 1 large grilled sausage 60 g, rump steak 102 g, slice of pâté 40 g

In Conclusion

The best way of reducing risk of bowel cancer is by choosing a healthier lifestyle. Meat and meat products make a significant contribution to nutrient intakes and, when consumed in moderation, can be enjoyed as part of a healthy, balanced diet.