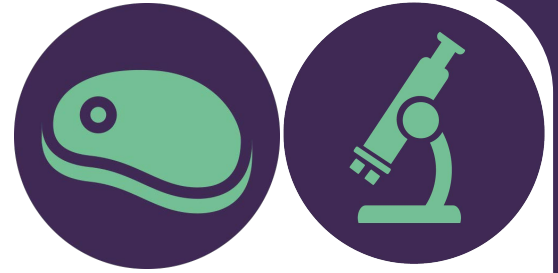


Food Standards Scotland provides advice to consumers, industry, local authorities and the Scottish Government on food safety, food standards, food labelling, nutrition and healthy eating.



The Facts about Nitrates and Nitrites in Processed Meats

What's FSS's view on nitrates and nitrites?

The current permitted limits for the use of nitrates and nitrites in processed foods are based on expert risk assessment, and FSS considers the risk from consuming foods containing nitrates and nitrites meeting these limits is low.

What are nitrates and nitrites?

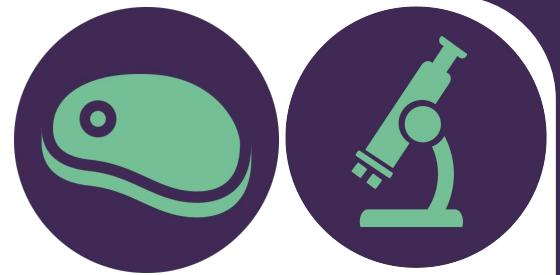
Nitrates and nitrites are found naturally in the food we eat. Most come from vegetables and only around 5% come from processed food. Nitrates and nitrites are permitted food additives. Their use in foods is regulated under EU law.

Potassium and sodium nitrates and nitrites are used to cure and preserve meats such as bacon, ham, hot dogs, salami, and pepperoni (this doesn't include fresh burgers or mince). They help to reduce the growth of micro-organisms including those which can cause food poisoning, and also preserve colour and enhance flavour.

Nitrates can be converted to nitrites in the body, where, under certain conditions, they can form compounds called nitrosamines. Some nitrosamines have been found to be carcinogenic (cancer-causing). The formation of nitrosamines is affected by other factors in the diet, for example, vitamin C can help to prevent its formation.

Is there a link between red and processed meat and cancer?

The link between eating red and processed meat and certain forms of cancer – particularly bowel cancer – has been well-known for several years. Scientists have identified a number of ways in which red and processed meat may be linked to cancer, but it is important to note that a definite cause has not yet been identified.



The respected organisation the International Agency for Research on Cancer, which is part of the World Health Organization, has classified processed meat as a hazard which 'definitely' causes cancer, and that red meat 'probably' causes cancer.

This does not mean that consuming processed meat carries the same levels of risk as other things linked to cancer. For example, Cancer Research UK shows evidence that the risk associated with smoking is much higher.

The European Food Safety Authority looked at the possible risks of nitrates and nitrites in processed meat by estimating the amount that can be eaten every day over a person's lifetime without any risk to their health. They found that the general population are within the Acceptable Daily Intake range.

How much red and processed meat is OK to eat?

Our advice is that people should try to eat a balanced diet as set out in the Eatwell Guide, which is based on solid and extensive evidence and forms the basis of all Food Standards Scotland's healthy eating advice.

This includes limiting the intake of red and processed meat to no more than 70g per day on average. 70g is the equivalent of around 2 rashers of thick bacon, 5 slices of ham or 3 slices of roast beef. The current average in Scotland is an estimated 56g per day, which is well within the recommended limit. However, that is an average, so some people may be eating more than they should.

For more detailed information

[European Food Safety Authority - scientific opinions on its review of nitrates and nitrites added to food - June 2017](#)