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Vegetarians 'avoid more cancers'

About half of the participants were vegetarians

Vegetarians are generally less likely than meat eaters to develop cancer but this does not apply to all forms of the disease, a major study has found.

The study involving 60,000 people found those who followed a vegetarian diet developed notably fewer cancers of the blood, bladder and stomach.

But the apparently protective effect of vegetarian did not seem to stretch to bowel cancer, a major killer.

The study is published in the British Journal of Cancer.

Researchers from universities in the UK and New Zealand followed 61,566 British men and women. They included meat-eaters, those who ate fish but not meat, and those who ate neither meat nor fish.

VEGETARIANS GOT NOTABLY FEWER OF THESE CANCERS:

Stomach

Bladder

Non-Hodgkin's lymphoma

Multiple myeloma

Overall, their results suggested that while in the general population about 33 people in 100 will develop cancer during their lifetime, for those who do not eat meat that risk is reduced to about 29 in 100.

Special protection?

The researchers said they found marked differences between meat-eaters and vegetarians in the propensity to cancers of the lymph and the blood, with vegetarians just over half as likely to develop these forms of the disease.

In the case of multiple myeloma, a relatively rare cancer of the bone marrow, vegetarians were 75% less likely to develop the disease than meat-eaters.

At the moment these findings are not strong enough to ask for particularly large changes in the diets of people following an average balanced diet

Professor Tim Key

Report author

The reduction was less notable for fish-eaters with these cancers. The reasons, researchers said, were unclear, but potential mechanisms could include viruses and mutation-causing compounds in meat - or alternatively that vegetables confer

special protection.

There were also striking differences in rates of stomach cancer. Although the numbers of cases were small, fish-eaters and vegetarians were about a third as likely to develop the disease as meat-eaters.

Previous research has already implicated processed meats in stomach cancer, so these findings were not entirely surprising. It is thought N-nitroso compounds found in these meats may damage DNA, while the high temperatures they are cooked at may also produce carcinogens.

But the same reduction for vegetarians was not found with cancers of the bowel, one of the most common forms of the disease.

Meanwhile the relative risk for fish-eaters and vegetarians of cervical cancer was twice that of meat-eaters. The number of cases was small, and could be down to chance but the researchers said it was possible that dietary factors influenced the virus behind cervical cancer.

Professor Tim Key, the lead author, said it was impossible to draw strong conclusions from this one single study.

"At the moment these findings are not strong enough to ask for particularly large changes in the diets of people following an average balanced diet."

'Complex process'

A spokesperson for Cancer Research UK, which funded the research, said: "These interesting results add to the evidence that what we eat affects our chances of developing cancer. We know that eating a lot of red and processed meat increases the risk of stomach cancer.

"But the links between diet and cancer risk are complex and more research is needed to see how big a part diet plays and which specific dietary factors are most important.

Myeloma UK said this was the first data of its kind for the bone marrow cancer "and for that reason we are treating it with caution.

"Dietary advice to myeloma patients remains aligned with national guidance - that they should eat a healthy, balanced diet high in fibre, fruit and vegetables and low in saturated fat, salt and red and processed meat."

Dr Panagiota Mitrou, Science and Research Programme Manager for the World Cancer Research Fund, said: "The suggestion that vegetarians might be at reduced risk of blood cancers is particularly interesting.

"However, this finding should be treated with caution since not much is known about the link between diet and these types of cancer. Further studies of vegetarians are needed before we can be confident this is actually the case."