

Plant protein may decrease risk of death

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Researchers from the United States suggest that replacing animal protein with a similar amount of protein from plant sources is associated with lower mortality. They observed a weak association between animal protein intake and an increased risk of death from cardiovascular disease, while plant protein intake was associated with a reduced risk of death from all causes.

Previous studies investigating the health effects of animal versus plant based protein had found inconclusive results. Some found an association between animal protein and increased risk of cardiovascular death. Some also found, when switching animal protein for plant protein, there was a lower risk of incidence and mortality due to cardiovascular disease. The current study aimed to examine plant versus animal protein in relation to death, and the results of substituting similar amounts of one protein source for another.

Two large groups of health professionals, of more than 85 thousand women and 46 thousand men with an average age of 49 years, had their animal and plant protein consumption assessed by means of food frequency questionnaires. Over a period of 32 years, these were taken every 4 years. Lifestyle and medical information was also collected.

Among the health professionals in the current study, the median consumption of animal protein was 14% of total daily energy, with values ranging from 9% to 22%. According to the authors, this intake was high for the majority. Those consuming the highest amount had a small increased risk of cardiovascular death. It was also observed that participants who consumed over 18% of energy from animal protein when compared with those consuming less than 10% were heavier, less physically active, consumed more fat, especially saturated, less fibre, and less plant foods.

On the other hand, those who consumed more plant based protein had a positive association with healthy behaviours, a healthier diet, and a lower risk of dying from all causes. The median protein consumption from plant sources was 4%, ranging from 2% to 6%. Major sources of plant protein for participants included cereals, legumes, beans, nuts, and pulses.

The researchers then calculated that switching just 3% of energy from animal protein for a corresponding amount of energy from plant protein would reduce the risk of death from all causes. This effect appears more pronounced when it is red processed meat, red unprocessed meat, or eggs that are less present in participant's diets.

Looking in more detail, the increased risk of death with higher animal protein intake was more pronounced in participants with obesity and those with heavy alcohol intake. Interestingly, the reduced death risk associated with a higher plant protein intake was more significant in participants who had at least one unhealthy behaviour such as high alcohol intake, physically inactive or having obesity. Those with healthier lifestyles had a lower consumption of red meat, eggs, and high-fat dairy, and consumed more protein from



poultry, fish and low-fat dairy, and more fibre, fruit, vegetables and wholegrains. The authors suggest that this, with their lack of high risk lifestyle behaviours, means that perhaps they did not have much more to gain with replacing the already low amount of red or processed meat with plant based sources.

In conclusion, the choice of plant over animal protein may lower the risk of death and likely has a number of additional health benefits. This data, the authors state, shows that official dietary recommendations should take into account the health impact that different protein sources have.

For further information, please see:

[Song M, Fung TT, Hu FB, et al. Association of Animal and Plant Protein Intake With All-Cause and Cause-Specific Mortality. JAMA Intern Med. Published online August 01, 2016. DOI:10.1001/jamainternmed.2016.4182.](#)