



## Plant-based meat alternatives might be depressing

There is mounting evidence suggesting that ultra-processed foods (UPF) are bad for our health, but if you stick to a vegetarian diet, is that still the case? Plant-based meat alternatives (PBMA) are considered to be ultra-processed foods and may be associated with similar harms.

In the first study of its kind, published in Food Frontiers, researchers from the University of Surrey found that vegetarians who consumed PBMA had a 42% increased risk of depression compared to vegetarians who refrained from PBMA.

The study analysed data from the UK Biobank and found no notable differences in intake of sodium, free sugar, total sugar, or saturated fatty acids between those vegetarians who ate PBMA and those who did not.

The researchers did find, however, that those who eat PBMA had higher blood pressure and C-reactive protein (CRP) levels, a marker of inflammation, and lower levels of apolipoprotein A, a protein associated with HDL, a “good” cholesterol; PBMA consumption was, however, also linked to a reduced risk of irritable bowel syndrome (IBS) by 40%.

Professor Nophar Geifman, from the School of Health Sciences at the University of Surrey and senior author of the study, said:

“The overall findings are reassuring, suggesting that plant-based meat alternatives may be a safe option when they are part of an overall balanced diet. However, the potential link between these types of food, inflammation and depression warrants further investigation.”

The study presented some limitations due to the data collected, which was predominantly from a white population in the UK, and dietary information only being gathered at the beginning of the study, not accounting for potential changes over time.

Professor Anthony Whetton, co-author of the study from the School of Veterinary Medicine at the University of Surrey, said:

“Ultra-processed plant-based meat alternatives can be a useful way for people to transition to a vegetarian diet effectively, and that helps with sustainable agricultural practices. Further research, including longitudinal studies and trials with more diverse populations, is necessary to confirm these findings and the relationship between vegetarian foods and mood.”