

## **South Carolina Researchers Find Association between Dietary Inflammatory Index and Gastrointestinal Infection Symptoms**

Researchers from the [Cancer Prevention and Control Program](#) at the University of South Carolina's [Arnold School of Public Health](#) have completed a study on the association between their Dietary Inflammatory Index (DII®) and gastrointestinal symptoms. They published their research in the [International Journal of Food Sciences and Nutrition](#).

Previous research, including many studies conducted by the Cancer Prevention and Control Program, have demonstrated that inflammation influences many aspects of health, including gastrointestinal illnesses. With this study, the authors examined the associations between DII and gastrointestinal symptoms using cross-sectional data from the National Health and Nutrition Examination Survey. The data included more than 25,500 individuals who completed the survey between 2005 and 2014.

The analyses yielded outcomes such as the self-reported presence of mucus or liquid in bowel leakage and stomach illness in the past month, diarrhea in the past year and number of weekly bowel movements. They estimated energy-adjusted DII scores from one 24-hour dietary recall and analyzed the data using logistic and linear regression.

The team found that pro-inflammatory energy-DII scores had elevated odds of mucus in leakage (71%), liquid in leakage (74%), stomach illness (43%) and diarrhea (65%) compared to anti-inflammatory energy-DII scores, which were all statistically significant. Further, individuals with more anti-inflammatory diets had more bowel movements.

The authors suggest that future research address whether anti-inflammatory diets provide protective effects against gastrointestinal infections. In addition, these studies should examine if these relationships are modified by other health behaviors.