The association between dietary inflammatory potential and gastric cancer: a case control study

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ABSTRACT (293 words)

Objective: No report is available about diet-disease associations in the understudied region of Afghanistan. Although the inflammatory potential of diet has been linked with several cancers, information about gastric cancer is scarce. The present study aimed to investigate the relationship between the inflammatory potential of the diet and odds of gastric cancer in Afghanistan**.**

Methods: In this hospital-based case-control study, we enrolled 90 newly-diagnosed cases (maximum one month elapsed since the detection) of gastric cancer and 180 age (±5) and sex-matched controls. All cases were pathologically confirmed gastric cancer patients, with no history of any type of other pathologically confirmed cancers. Controls were healthy individuals and relatives of patients in the hospital. Dietary assessment intakes of participants during a year before the diagnosis of gastric cancer in cases and during a year before the interview in controls were examined by a pre-tested Willett-format food frequency questionnaire (FFQ). DII was calculated based on energy-adjusted amounts of several foods and nutrients with inflammatory or anti-inflammatory potential, as introduced by earlier studies.

Results: Mean age of study participants was 54 years, of them 73% were males. After adjustment for age and sex, individuals in the highest tertile of the inflammatory potential of the diet were 2.47 times (95% CI: 1.31- 4.66) more likely to have gastric cancer compared with those in the lowest tertile. Further adjustment for other potential confounders did not substantially affect the association; such that participants with the greatest inflammatory potential of the diet had approximately 3.59 times (95% CI: 1.16, 11.02) increased odds of

gastric cancer than those with the lowest adherence. Additional adjustment for BMI strengthened the association (OR: 3.75; 95% CI: 1.14-12.30).

Conclusion: We found a significant positive association between inflammatory potential of the diet and risk of gastric cancer.

Recent Publication:

Iron Supplementation among children aged 6 to 59 months in Afghanistan: A report of Afghanistan Demographic and Healthy Survey 2015. Food Sciences and Nutrition journal

The association between dietary inflammatory potential and gastric cancer: a case control study. Nutrition and Cancer journal.

Dietary and Weight changes during COVID 19 pandemic in Afghanistan, America nutrition journal

The association between diet and esophageal cancer in Afghanistan: a case control study. The Indian journal of nutrition and Dietetics

Biography:



Ahmad Mujtaba Barekzai is Nutrition consultant and head officer of community nutrition department at Ghazanfar Institute of Health Sciences. I have extensive experience in nutrition science and public health with planning, reports, monitoring, health management, dietitian, analysis, evaluation, supervision, communication, documentation and training with having good skills and knowledge of different programs for medical students, medical specialists, women, children and poverty-ridden families in Afghanistan.

After my degree in Public Health with a specialization in epidemiology and research, I chose to pursue a master's in Nutrition Sciences. In the last seven years, I have worked in different international and national organizations, where I have taken over different responsibilities at different times as a nutritionist

and clinical nutrition consultant. Additionally, I was the head officer of public health and lecturer of epidemiology at Spinghar medical university. Moreover, I was a nutrition and dietetics trainer for medical specialists, medical doctors, nurses and midwives at government hospitals, and Kabul University of Medical Science.

Yours Sincerely

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