

P10: Protective effect of fruits and vegetables on gastric cancer: systematic review

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Introduction: The use of Complementary and/or Alternative Medicines has increased significantly in recent years. Its availability allows the use of these medicines for prevention and/or relief of many diseases, including cancer. Gastric cancer is the fourth leading cause of cancer death at global level, thus prevention strategies are a major concern. The high consumption of vegetables and fruits can reduce the risk of gastric cancer. However, the diet as a risk factor for this cancer continues to be a controversial issue.

Objectives: This systematic review aims to analyze the relationship between the consumption of fruits and vegetables and the prevention of gastric cancer.

Materials and Methods: It was performed a computerized search of epidemiologic studies that investigated the relationship between the consumption of fruits and vegetables and gastric cancer risk, published between 2008 and 2013, in Pubmed database. A total of 11 case-control studies and one cohort study fulfilled the inclusion criteria.

Results and Discussion: Our results showed that fruits and vegetables (especially raw) have a beneficial role on the risk of gastric cancer, presenting the studies odds ratio values lower than one. These effects may be due to their high content of several antioxidants and vitamins, such as carotenoids, polyphenols, and vitamin C. Vegetables also contain levels of glucosinolatos with high anticarcinogenic properties. Garlic and citrus fruits showed the higher protective effects. The majority of patients with gastric cancer are men; however, they showed best results in the reducing of gastric cancer risk with the intake of fruits and vegetables. Considering the cancer location and histological type, results are inconclusive.

Conclusion: We observed inverse associations between some specific vegetables and fruits and gastric cancer risk; however more prospective studies are needed to determine the best daily consumption and the exact mechanisms associated to the protective effects.

References

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