

Adherence to Dietary Approaches to Stop Hypertension-Style Diet and Risk of Mortality from Cancer: A Systematic Review and Meta-Analysis of Cohort Studies

Authors : Roohallah Fallah-Moshkani, Mohammad Ali Mohsenpour, Reza Ghiasvand, Hossein Khosravi-Boroujeni, Seyed Mehdi Ahmadi, Paula Brauer, Amin Salehi-Abargouei

Abstract : Purpose: Several investigations have proposed the protective association between dietary approaches to stop hypertension (DASH) style diet and risk of cancers; however, they have led to inconsistent results. The present study aimed to systematically review the prospective cohort studies conducted in this regard and, if possible, to quantify the overall effect of using meta-analysis. Methods: PubMed, EMBASE, Scopus, and Google Scholar were searched for cohort studies published up to December 2017. Relative risks (RRs) which were reported for fully adjusted models and their confidence intervals were extracted for meta-analysis. Random effects model was incorporated to combine the RRs. Results: Sixteen studies were eligible to be included in the systematic review from which 8 reports were conducted on the effect of DASH on the risk of mortality from all cancer types, four on the risk of colorectal cancer, and three on the risk of colon and rectal cancer. Four studies examined the association with other cancers (breast, hepatic, endometrial, and lung cancer). Meta-analysis showed that high concordance with DASH significantly decreases the risk of all cancer types (RR=0.83, 95% confidence interval (95%CI):0.80-0.85); furthermore participants who highly adhered to the DASH had lower risk of developing colorectal (RR=0.79, 95%CI: 0.75-0.83), colon (RR=0.81, 95%CI: 0.74-0.87) and rectal (RR=0.79, 95%CI: 0.63-0.98) cancer compared to those with the lowest adherence. Conclusions: DASH-style diet should be suggested as a healthy approach to protect from cancer in the community. Prospective studies exploring the effect on other cancer types and from regions other than the United States are highly recommended.

Keywords : cancer, DASH-style diet, dietary patterns, meta-analysis, systematic review

Conference Title : ICFNFSPH 2019 : International Conference on Food, Nutrition, Food Safety and Public Health

Conference Location : Prague, Czechia

Conference Dates : March 21-22, 2019