

The relation of healthy and Western dietary patterns to the risk of endometrial and ovarian cancers: a systematic review and meta-analysis.

Abstract

Dietary patterns have been used to explore the association between dietary factors and risk of endometrial (EC) and ovarian cancer (OC); however, the results are inconclusive. This meta-analysis aimed to analyze these associations.

METHODS:

Pertinent studies published prior to March 2016 were systematically searched. The common dietary patterns were selected and adjusted risk estimates were derived by comparing the highest with the lowest categories of dietary pattern scores.

RESULTS:

A total of 8 studies, 5 for endometrial cancer (1 cohort and 4 case-control studies including 2617 cases and 78082 participants/controls) and 3 for ovarian cancer (1 cohort and 2 case-control studies with 2025 cases and 101482 participants/controls) were included in this meta-analysis. A lower risk of EC was shown for the highest compared with the lowest category of the healthy dietary pattern (OR = 0.84, 95% CI: 0.72-0.98; P for heterogeneity = 0.10), whereas the Western dietary pattern was related to the higher risk of EC (OR = 1.19, 95% CI: 1.01-1.41; P for heterogeneity = 0.35). No significant relationship was found between the healthy dietary pattern (OR = 1.03, 95% CI: 0.69-1.53; P for heterogeneity = 0.01) and OC, while, adherence to the western pattern was associated with a 73% higher risk of OC (OR = 1.73, 95% CI: 1.08-2.37; P for heterogeneity = 0.06).

CONCLUSION:

A Western dietary pattern might be associated with a higher risk of endometrial and ovarian cancer.