



## 146 - INFLAMMATORY POTENTIAL OF THE DIET AND ENDOMETRIAL CANCER RISK AND SURVIVAL IN EPIC STUDY

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### Resumen

**Background/Objectives:** Diet plays a central role regulating chronic inflammation, a key etiologic mechanism in cancer development and progression. Evidence suggests a possible relationship between the inflammatory potential of the diet and the risk and survival of certain types of cancer. However, data on endometrial cancer remains limited. We aimed to investigate the association between the inflammatory potential of the diet and endometrial cancer risk and survival in middle-aged European women.

**Methods:** We included 285,418 women from the European prospective investigation into cancer and nutrition (EPIC) study. During 15 years of follow-up, 1,955 incident endometrial cancer cases were identified; 380 women died, including 133 from endometrial cancer. The inflammatory score of the diet (isd) was derived from baseline data. Cox proportional hazards regression models assessed endometrial cancer risk. Fine-gray competing risks models evaluated mortality.

**Results:** Women with endometrial cancer were older, had higher bmi and were more often postmenopausal. No association was found between pro-inflammatory diets and endometrial cancer risk (ISD HR T3 vs. T1 = 0.92, 95%CI 0.80-1.05). Higher ISD was associated with a slight increase in overall mortality, but not with cancer-specific mortality. Inactive women with higher ISD appeared to have a twofold increased risk of death (ISD HR T3 vs. T1 = 2.06, CI 1.23-3.45). Women with overweight showed a tendency toward an increased mortality, although it did not reach statistical significance (ISD HR T3 vs. T1 = 1.72, CI 0.99-2.99). No heterogeneity was detected across subgroups.

**Conclusions/Recommendations:** In this cohort, the inflammatory potential of the diet was not associated with endometrial cancer risk. However, a pro-inflammatory diet may negatively affect survival among women with endometrial cancer, particularly those physically inactive. It is possible that these individuals might benefit more from initiatives aimed at improving survival through lifestyle changes.