

VEGETARIAN DIET AFFECTS CANCER RISK

The overall incidence of cancer is lower among vegetarians than in individuals who eat meat, but new findings suggest the reverse is true for colorectal cancer.

Previous studies of dietary effects on cancer risk produced mixed results, which led Timothy Key and his team to compare the incidence of cancer among vegetarians and meat eaters in the Oxford cohort of the European Prospective Investigation into Cancer and Nutrition (EPIC), a 10-country study of the relationship between diet and cancer risk.

During the 1990s, the investigators recruited 63,550 participants aged between 20 and 89 years, who were divided into groups according to whether they were vegetarian, ate fish, or were meat eaters. The researchers used data from national cancer registries to calculate standardized incidence ratios (SIRs), which compared the incidence of cancers in the cohort to that of the national average; they additionally compared the occurrence of cancers in the diet groups using incidence report ratios (IRRs).

After adjustment for age, sex and smoking, fish eaters had significantly fewer cancers than meat eaters (IRR 0.83, 95% CI 0.71–0.96). Vegetarians also had fewer malignant neoplasms than meat eaters (IRR 0.89, 95% CI 0.80–1.00), although the difference was not significant. Surprisingly, and in marked contrast with previous reports, the prevalence of colorectal cancer in vegetarians within the EPIC-Oxford group was significantly higher than that in meat eaters (IRR 1.39, 95% CI 1.01–1.91).

The incidence of all cancers in the EPIC-Oxford group was significantly lower than the national average (SIR 72%, 95% CI 69–75%) so, to assess whether other variables might have influenced the results, further investigation of the participants' type of cancer and dietary intake is warranted.

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Original article Key, T. J. *et al.* Cancer incidence in vegetarians: results from the European Prospective Investigation into Cancer and Nutrition (EPIC-Oxford). *Am. J. Clin. Nutr.* **89** (Suppl.), 1620S–1626S (2009).