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Risk of ischaemic heart disease among British vegetarians and non-vegetarians: results from the EPIC-Oxford cohort study

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Very few previous prospective studies have examined differences in the risk of non-fatal ischaemic heart disease between vegetarians and non-vegetarians⁽¹⁾. The objective of this study was to examine the associations of a vegetarian diet with the risk of risk of incident (fatal and non-fatal) ischaemic heart disease (IHD).

Participants were 44,561 men and women living in England and Scotland who were enrolled in the European Prospective Investigation into Cancer and Nutrition (EPIC)-Oxford study⁽²⁾. Vegetarian status was assessed at baseline with 34% reporting consuming a vegetarian diet. Cases of IHD were identified through linkage with hospital records and death certificates. Serum lipids and blood pressure were measured in a subgroup of 1546 participants. The risk of IHD by vegetarian status was estimated using multivariate Cox proportional hazards models.

After an average follow-up of 11.6 years, there were 1235 cases of IHD (1066 hospital admissions and 169 deaths). Compared with non-vegetarians, vegetarians had lower mean non-HDL cholesterol concentrations [−0.45 (95% CI, −0.60 to −0.30) mmol/L] and systolic blood pressure [−3.3 (95% CI, −5.3 to −0.7) mmHg]. Vegetarians had a 32% lower risk [hazards ratio (HR), 0.68 (95% CI, 0.58 to 0.81)] of IHD compared with non-vegetarians. The risk of IHD was 25–30% lower in vegetarians compared with non-vegetarians in each of the subgroups illustrated in Figure 1.

Consuming a vegetarian diet was associated with a lower risk of admission to hospital for or death from IHD, a finding that might be explained by differences in IHD risk factors.

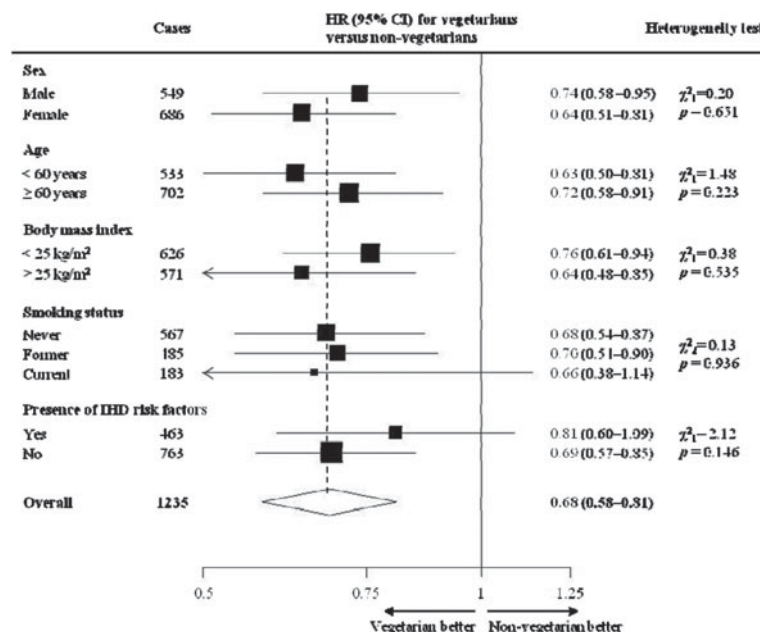


Figure 1: Risk of ischaemic heart disease in vegetarians compared with non-vegetarians within certain subgroups in the EPIC-Oxford study.

Presence of IHD risk factors includes at least one of the following: hypertension, hyperlipidaemia or diabetes. All analyses are stratified by sex, method of recruitment and region of residence and adjusted for smoking, alcohol, physical activity, education level, Townsend deprivation index and use of oral contraceptives or hormone therapy for menopause.

- Fraser GE (2005) *J Nutr Health Aging* 9(1): 53–58.
- Davey GK, Spencer EA, Appleby PN *et al.* (2003) *Public Health Nutr* 6(3): 259–268.