ESOPHAGEAL CANCER

Hot tea raises risk of cancer

Drinking hot tea is strongly associated with an increased risk of developing esophageal cancer, according to a new study by Islami and colleagues. Compared with drinking lukewarm or warm tea, hot tea or very hot tea increases risk of esophageal cancer by twofold and eightfold, respectively. Moreover, drinking tea 2–3 min or <2 min after it is poured is associated with 2.5-fold and 5.5-fold increased risks of cancer, respectively, compared with drinking it 4–6 min after it is poured.

“Educational programs might be helpful in decreasing the incidence of esophageal cancer...”

The investigators conducted this research in individuals from Golestan, Iran. They noted that although this province has one of the highest rates of esophageal cancer in the world, alcohol and tobacco were not its major

causes in this area; women hardly smoke or drink in this part of the world. Previous research identified tea-drinking as a suspected causal factor of this disease. The researchers performed a population-based case-control study to validate this association.

Three hundred patients with esophageal cancer and 571 healthy individuals (matched in terms of neighbourhood, age and sex) were questioned about their tea-drinking habits—if they drank tea, how hot they drank it, and what the interval was between pouring and drinking. In a separate cohort study, 48,582 participants were asked these same questions, but the temperature of their tea was also measured. The findings of the cohort study correlated with those of the case-control study, which supported the validity of the investigators' findings.

The team would now like to replicate their findings, examine possible mechanisms of action for this association, and investigate potential links to other gastrointestinal cancers. “Preventative

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work should, however, begin now. Educational programs might be helpful in decreasing the incidence of esophageal cancer by increasing awareness about the potential risks of thermal injury,” says Reza Malekzadeh, a senior investigator on the team.

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Original article Islami, F. *et al.* Tea drinking habits and oesophageal cancer in a high risk area in northern Iran: population based case-control study. *BMJ* doi:10.1136/bmj.b929