P2-118 | VITAMIN C INTAKE FROM DIARY RECORDINGS AND RISK OF BREAST CANCER IN THE UK DIETARY COHORT CONSORTIUM

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Introduction Vitamin C intake has been inversely associated with breast cancer risk in case-control studies, but not in meta-analyses of cohort studies using Food Frequency Questionnaires. No study has assessed this relationship prospectively using food diaries which may more accurately measure intake.

Methods Estimated dietary vitamin C intake was derived from 4 to 7 day food diaries pooled from five prospective studies in the UK Dietary Cohort Consortium. This nested case-control study of 851 incident breast cancer cases and 2727 matched controls examined breast cancer risk in relation to dietary vitamin C intake using conditional logistic regression adjusting for relevant covariates. Additionally, total vitamin C intake from supplements and diet was analysed in the three largest cohorts.

Results No evidence of an association was observed between breast cancer risk and dietary (OR=1.00 per 60 mg/d, 95% CI 0.91 to 1.09, P_{trend}=1.0) or total vitamin C intake (OR=1.01 per 60 mg/d, 95% CI 1.00 to 1.03, P_{trend}=0.1) in analyses using continuous estimates or by fifths of intake. Additionally, there was no association for post-menopausal women.

Conclusions This pooled analysis of individual UK women found no evidence of associations between breast cancer incidence and dietary or total vitamin C intake derived uniquely from detailed diary recordings.

P2-119 | USE OF SUPPLEMENTS CONTAINING VITAMIN C AND BREAST CANCER RISK IN THE UK WOMEN'S COHORT STUDY

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Introduction Vitamin C supplementation is common in UK women and high doses are often consumed, however evidence is lacking regarding their effects on breast cancer risk in UK users.

Method 11 184 middle-aged women from the UK Women's Cohort Study were followed up for a median of 7.4 years. Associations between 239 registered incident breast cancers and vitamin C contained in supplements recorded by 4-day diaries were analysed by Cox's regression models using four intake categories: no frequent use of supplements containing vitamin C; frequent intake up to and including EU recommended allowances (≤60 mg/d); between 60 mg and 500 mg/d; and high intake (≥500 mg/d). Adjustment was made for relevant covariates.

Results Compared to women who did not use supplements containing vitamin C, there was no evidence of significant associations between breast cancer incidence and regular vitamin C supplementation in any intake category. Additionally, no associations were found using continuous estimates (HR = 0.98 per 60 mg/d, 95% CI 0.94 to 1.02, P_{trend}=0.3) or in post-menopausal sub-analyses. However pre-menopausal women in the lowest intake category (≤60 mg/d) had significantly increased risks (HR=2.37, 95% CI 1.32 to 4.27) compared to non-users of vitamin C.

Conclusion There was no evidence that supplementation with vitamin C per se was associated with breast cancer incidence in UK women, even at high doses. The increased breast cancer risk found for pre-menopausal women consuming supplements containing vitamin C less than or equal to EU recommendations may be due to the effects of other ingredients in these supplements.

P2-120 | CONSUMPTION OF COFFEE, TEA, OR GREEN TEA AND ARTERIOLOSCLEROSIS DEVELOPMENT

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Some epidemiological studies have suggested a protective role of beverages such as coffee and tea in stroke, although its relation to arteriolosclerosis has not been examined. We conducted a two-wave prospective study at three work sites to examine the relation of consumption of coffee, tea or green tea to arteriolosclerosis on retina. Both eyes of the participants were photographed with nonmydriatic fundus camera at baseline survey conducted between 1997 and 1999 as well as at follow-up survey conducted between 2002 and 2005. Retinal arteriolosclerotic change judged by a physician with Scheie's classification for both surveys. Beverage consumption of coffee, tea, or green tea was assessed using a self-administered questionnaire at baseline. Participants at baseline survey were 1587 male aged 43—49, and 1074 were retained at follow-up. Of them, 84 persons with Scheie arteriolosclerosis grade of 2 or more at baseline were excluded from following analysis. At follow-up, 125 persons were newly judged as being with Scheie arteriolosclerosis grade of 2 or more. Those who frequently drank the beverage such as coffee were less likely to develop arteriolosclerosis (12.0% for ≥3 cups/day vs 17.7% for <1—2 cups/day). The OR (95% CI) for developing arteriolosclerosis was 0.64 (0.42 to 0.99) after controlling for possible confounders. Arteriolosclerotic retinal change is strongly correlated with cerebral arteriolosclerosis. Our results suggest that beverages such as coffee, tea, or green tea may have a protective role in sclerotic change of arteriole not only on retina but also in brain.

P2-121 | HEAVY METALS EXPOSURE AND BLOOD PRESSURE LEVELS OF RUSSIAN CHILDREN

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Introduction Evidence-based data on chronic sub toxic effects of lead, nickel and cerium on blood pressure (BP) of children is insufficient.
Methods The target population consisted of a stratified sample of preschool 5—7-year-old children from Gus, 132 children participated (response 80%) and 211 school children 7—10 y.o. (response 60%), residing in central district of Moscow. BP was measured in