

higher risk of death from any cause compared to women consuming a more anti-inflammatory diet (HR Q4:Q1 = 1.18; 95% CI, 1.01–1.38; P trend = 0.015). In analyses using DII score from both diet and supplements, a pro-inflammatory DII score was associated with even higher risk of all-cause mortality (HRQ4:Q1 = 1.63; 95% CI, 1.40–1.91; P trend < 0.0001). Conclusions: Consuming a more pro-inflammatory diet after cancer diagnosis was associated with increased risk of death from any cause.

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Hormone Contraception before the First Birth and Ovarian Cancer Risk

Cook LS, Pestak CR, Leung ACY, Le ND

Introduction: Combined oral contraceptive (OC) use strongly and consistently reduces the risk for epithelial ovarian cancer (EOC); longer durations of use and more recent use are associated with the strongest reductions in risk. However, it is unknown if exclusive OC use before the first birth is associated with a reduction in EOC risk many years later. Therefore, we investigated the risk for EOC among parous women associated with exclusive OC use before the first birth. **Methods:** From a population-based case-control study in Alberta and British Columbia, Canada, 2001–2011, we included 1144 invasive EOC cases and 2513 controls who were >40 years at diagnosis/reference date. Participants reported OC use and all pregnancies via a telephone interview or self-administered questionnaire (in the early years of the study). Duration of OC use was evaluated as a continuous variable and by categories: non-users (never use or <6 months of use), <5, 5–<10, >10 years, unknown. Using logistic regression, we estimated adjusted odds ratios (aORs) and 95% confidence intervals (CI), controlling for study site, age, parity, breastfeeding, first degree family history of breast/ovarian cancer, tubal ligation, and BMI. **Results:** OC use at any time during reproductive life was associated with a 42% reduced risk for EOC relative to non-users (aOR = 0.58, 95% CI, 0.49–0.69). Among parous women, each additional year of exclusive OC use before the first birth conferred an 11% risk reduction relative to non-users (aOR = 0.89 95% CI, 0.86–0.94, linear trend p -value < 0.01). Results were similar when we restricted to cases with high grade serous cancers (aOR = 0.90 95% CI, 0.84–0.95, linear trend p -value < 0.01) and for cases with endometrioid/clear cell cancer (aOR 0.88 95% CI, 0.80–0.95, linear trend p -value < 0.01). **Discussion:** Among parous women, exclusive use of OCs before the first birth was associated with a strong reduction in EOC risk many years later. Because OCs stop ovulation, this reduced risk may be due to a reduction in lifetime ovulatory cycles. However, it is also possible that OC use at younger ages, before the first birth, represents a window of opportunity to have a substantial impact on reducing risk that remains for many years, informing possible prevention strategies.

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Dietary Adequacy among Tobacco User Households in Bangladesh

Virk-Baker MK, Parascandola M

Background: Smokers have less adequate diet as compared to non-smokers. The indirect effects of tobacco on diet may have profound implications for health and disease outcomes. Less is known about the influence of tobacco on dietary intakes in low-income countries where malnutrition is a major public health challenge. Additionally, the effect of smokeless tobacco on dietary intake are unknown. The purpose of this study was to evaluate influence of tobacco use on dietary intakes in a developing country. **Methods:** We used the nationally representative Household Income Expenditure Survey (HIES-2010) from Bangladesh. Detailed dietary data including both ethnic and regional specific foods were collected for 14 days and comprised of 7 visits with two days recalls. Overall, 71% of the households reported positive expenditure on tobacco (smoking and/or smokeless), and were considered tobacco users. **Results:** Out of 12240 households, 2061 used smoking tobacco only (16.8%), 3284 used smokeless tobacco only (26.8%), and 3348 were dual-users (27.4%). Our results indicate that after controlling for household expenditure, household size, place of residence, and education, tobacco users consumed significantly lower daily mean per capita of vegetables (β = -18.35 g/day; P < 0.0001), milk and dairy (β = -12.83 g/day; P < 0.0001), fish (β = -11.19 g/day; P < 0.0001), meat (β = -7.60 g/day; P < 0.0001), legumes (β = -3.31g/day; P < 0.0001), eggs (β = -1.60 g/day; P < 0.0001) as compared to non-users. However, mean per capita daily intakes of cereal products (β = 24.744 g/day; P < 0.0001) was significantly higher among tobacco users as compared to non-users. We observed similar significant associations for smokeless tobacco users as compared to non-users. **Conclusion:** The project provides evidence to support policy recommendations for addressing poor dietary intakes and malnutrition burden among tobacco user households in a developing country like Bangladesh. Addressing tobacco use in relation to malnutrition would make tobacco control a higher priority for effective tobacco related chronic disease prevention, as well as achieving the Millennium Development Goal 1, and post-2015 development agenda of eradicating extreme poverty and hunger.

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Influence of Personal Exposure to the Cancer of a Loved One on the Breast Cancer Prevention Decisions of High Risk Women

Padamsee TJ, Muraveva A, Wills C, Yee L, Paskett E

Purpose: To explore the impact of close personal exposure to cancer in a family member or friend in the prevention decisions of women at elevated risk of breast cancer. **Methods:** 50 semi-structured interviews with women at elevated risk of breast cancer, focusing on perceptions of risk; risk information;