participants from across the UK were asked to keep a diary of everything they ate and drank over four days. Diaries were coded and intake frequencies of foods derived using groups of nutritionally similar foods. For the 2% of participants who had three-day diaries, the frequencies were multiplied by 4/3. Principal component analysis (PCA) was performed on frequencies of consumption. Reduced-item prudent diet scores were calculated by multiplying coefficients for the ten most characteristic foods by each individual's standardized reported frequency of consumption. Prudent diet scores calculated for both the full and 10-item prudent diet scores were standardised. Willing participants provided a blood sample; vitamin C status was measured on the BMG Labtech FLUOstar OPTIMA plate reader and beta carotene status by high performance liquid chromatography.

Results 6090 adults (aged 20 to 96 years) provided dietary data in the first eight years of the NDNS (2008–2016). PCA of intake frequencies of 126 food groups revealed a prudent diet pattern characterised by high intakes of wholemeal bread, vegetables, fruit, water, oily fish, yoghurt and high-fibre breakfast cereals, and low intakes of white bread, sugar, sugar-sweetened soft drinks and chips. Pattern coefficients were very similar when analyses were conducted separately in males and females, and in those aged less than 65 and 65+ years. The 10-item prudent diet score was calculated based on foods with the five highest and five lowest coefficients. Spearman's correlation between the full and 10-item prudent diet scores was 0.84. The mean difference between the full and 10-item prudent diet scores was 0.00SDs with Bland-Altman limits of agreement -1.89 to 1.89SDs. Notable correlations were seen between the full prudent diet score and vitamin C (r_s=0.43) and beta-carotene status (r_s=0.45); these were only slightly attenuated for the 10-item prudent diet score (r_s=0.40, r_s=0.38 respectively).

Conclusion A 10-item prudent diet score based on foods that characterise the prudent dietary pattern describes a healthy diet. A 10-item FFQ would have clear advantages for time and resources, and may provide an appropriate tool to describe UK diets while reducing participant burden.

OP108 | **A PROSPECTIVE COHORT STUDY ON NUT AND PEANUT BUTTER INTAKE AND THE RISK OF ENDOMETRIAL AND OVARIAN CANCER**

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Background Nut intake has been associated with reduced cancer-related mortality and cancer risk. However, very few studies investigated the association between nut consumption and the risk of endometrial and ovarian cancer, with inconclusive results. We prospectively examined the relation between total nut, tree nut, peanut, and peanut butter intake and the risk of endometrial and ovarian cancer in the prospective Netherlands Cohort Study (NLCS).

Methods In 1986, 62,573 women aged 55–69 years were included in the NLCS. At baseline, all participants filled in a questionnaire and a subcohort of 2,589 women was randomly selected. After 20.3 years of follow-up, 389 endometrial and 347 ovarian cancer cases with complete data were included in the analysis. Hazard ratios (HRs) were calculated in multivariable-adjusted Cox regression analyses, using a case-cohort approach.

Results Compared to nonconsumers, the HRs (95% confidence intervals) for women consuming 10+ g total nuts/day were 1.23 (0.82–1.87) for endometrial cancer and 0.84 (0.57–1.24) for ovarian cancer. For tree nut, peanut, and peanut butter intake, also no significant relations with endometrial or ovarian cancer were observed. In the endometrial cancer analyses, significant interactions of total nut intake with body mass index and cigarette smoking status were found.

Conclusion The results of this study suggest that intake of total nuts, tree nuts, peanuts, and peanut butter is not related to the risk of endometrial or ovarian cancer. The observed interactions in the endometrial cancer analyses, particularly by cigarette smoking status, require confirmation in other studies.

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OP40 | **THE ASSOCIATION BETWEEN CHILDHOOD SOCIO-ECONOMIC POSITION AND ADVERSE CHILDHOOD EXPERIENCES (ACES): A SYSTEMATIC REVIEW**

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Background An increasing amount of evidence has emerged in recent years of the association between different aspects of childhood adversity (termed ACEs – Adverse Childhood Experiences – in a great many studies) and increased risks of negative outcomes in later life. Consequently, ACEs have become a policy priority in many quarters. Despite most ACEs being highly socially patterned, there has been very little discussion in the political discourse regarding the role of childhood socio-economic conditions in understanding and addressing them. The aim, therefore, was to investigate what is known about the association between childhood socio-economic position (SEP) and ACEs, including the extent to which the former explains the latter.

Methods Relevant databases (MEDLINE; psycINFO; ProQuest Public Health Database, Cochrane Library) were searched for all papers satisfying four inclusion criteria: (1) measurement of social position in childhood (prior to ACEs measurement); (2) measurement of multiple aspects of childhood adversity; (3) childhood adversity was the outcome; (4) statistical quantification of the relationship between childhood SEP and childhood adversity. Non-English language papers were excluded.

The initial search terms included ACEs, SEP, and their synonyms. A second search additionally included 'maltreatment'. Papers were independently screened and critically appraised by two authors. Risk of bias was assessed, and overall study quality calculated using a modified version of the Hamilton Tool. Results were synthesised narratively because of the wide variation in definitions of exposures and outcomes.

Results For the ACEs-based search, 2,779 papers were screened, of which 52 were reviewed in full-text. Of these, only six were eligible for qualitative synthesis. The second search (including maltreatment) increased the numbers to: 4,463 papers screened; 166 full texts; 35 included for