daily smoking prevalence data to obtain estimates of future incident case numbers. By applying the calculated PIFs to the projected cancer cases for each policy intervention, we estimated the number of future cancer cases that would be expected under the corresponding scenario.

**Results** Our preliminary results suggest that over a 30-year period, an estimated 11.5% (men 12.0%, women 10.5%) of smoking-related cancer cases could be prevented, if a combination of the observed tobacco control policy interventions were to be implemented in Germany. The most effective single intervention was found to be annual 10% price increases in cigarettes over 10 years, which may prevent about 6.8% of cancer cases (men 7.2%, women 6.3%), followed by plain packaging (men 3.8%, women 3.3%), a comprehensive marketing ban (men 2.0%, women 1.7%), and a single 10% price increase (men 1.0%, women 0.9%). The highest PIFs for all interventions combined were observed for lung cancer (men 16.8%, women 16.4%), cancer of the larynx (men 15.9%, women 15.6%), and the oral cavity (men 15.3%, women 13.8%).

**Conclusion** Although our simulation model relies on several assumptions, this modelling approach allows a comparison of the impact of different policy intervention scenarios on future cancer incidence. Our results suggest that the expected cancer incidence in Germany could be considerably reduced by implementing tobacco control policies as part of a primary cancer prevention strategy.

**Food Policy**

**OP06** THE IMPACT OF THE ANNOUNCEMENT OF THE UK SOFT DRINKS INDUSTRY LEVY ON HOUSEHOLD SOFT DRINKS PURCHASES

D Pell*, TL Penney, O Mytton, M White, J Adams. UKCRC Centre for Diet and Activity Research (CEDAR), MRC Epidemiology Unit, Cambridge, UK

10.1136/jech-2019-SSMabstracts.6

**Rationale** The UK Soft Drinks Industry Levy (SDIL) was introduced in response to evidence on the role of sugary drinks in obesity, diabetes and tooth decay. The levy is two-tiered: £0.24/L for drinks containing >8 g/100 ml of added sugar and £0.18/L for drinks containing 5–8 g sugar/100 ml, and directed at manufacturers and importers of soft drinks, in order to encourage reformulation. The levy came into effect in April 2018, but was announced two years before to allow industry time to adapt. The announcement may represent a public health intervention itself.

**Aim** To examine change in the volume of, and amount of sugar from, household purchases of soft drinks from two years before announcement of the SDIL to two years after.

**Methods** An interrupted time series design was used. Kantar WorldPanel data from ~43,000 UK households recorded all food and drink purchases brought home, covering April 2014 to March 2018 (208 weeks). Outcomes were purchased volume of, and sugar from, liable soft drinks in each levy tier as well as non-liable soft drinks and confectionery (a potential substitute category) per household per week, modelled against the counterfactual of no announcement. Household purchases of toiletries (shampoo, conditioner and liquid soap) were included as a comparator. Regression analyses were weighted to reflect UK purchasing patterns.

**Results** Immediately after the announcement there was an increase in the volume of (73 ml per household per week, 95%CI: 29,119), and amount of sugar from (11.0 g per household per week, 95%CI: 3.7, 18.4), higher tier drinks and a decrease in the amount of sugar from confectionery (-24.6 g per household per week, 95%CI: -47.1, -2.15). In the period following the announcement there was a significant downward trend in the volume of (0.01 ml per household per week2, 95%CI: -0.02, -0.01), and amount of sugar (-0.0008 g per household per week2, 95%CI: -0.0012, -0.0004) from, drinks in the lower tier. During the same period sugar from non-liable soft drinks increased (0.0003 g per household per week2, 95%CI: 0.00001, 0.00064)

**Conclusion** The announcement of the SDIL was associated with sustained reductions in the volume of, and amount of sugar from, drinks in the lower levy tier purchased by UK households; and a sustained increase in the amount of sugar from non-liable soft drinks. This likely reflects reformulation by manufacturers so that many drinks previously in the lower tier are now non-liable but still contain sugar. There was no evidence of substitution to confectionary.

**OP07** CHANGES IN THE SUGAR CONTENT OF FOOD PURCHASES AND SOCIO-ECONOMIC INEQUALITIES: A LONGITUDINAL STUDY OF BRITISH HOUSEHOLDs, 2014–2017

1N Berge*, 1S Cummins, 2R Smith, 1L Cornelisen, 1Department of Public Health, Environments and Society, London School of Hygiene and Tropical Medicine, London, UK; 2College of Medicine and Health, University of Exeter, Exeter, UK; 3Faculty of Public Health and Policy, London School of Hygiene and Tropical Medicine, London, UK

10.1136/jech-2019-SSMabstracts.7

**Background** The majority of the UK population fall short of meeting dietary recommendations. This has led to a recent policy focus on improving population diet through reducing sugar consumption. This study aims to explore whether there have been recent changes in the sugar content of take-home food and beverage purchases. We assess whether these changes differ by socio-economic position (SEP).

**Methods** We used 2014 to 2017 data from the Kantar WorldPanel UK, a nationally representative panel study of food and beverages bought by British households and brought into the home (n=32,000 per year). Households used hand-held barcode scanners to report purchases of over 151 million food and beverage products, for which total sugar content was obtained. We used linear mixed models to estimate average changes in the average sugar content of daily purchases by occupational social grade (high-SEP: A/B, mid-SEP: C1/C2 and low-SEP: D/E) from 24 healthier and less healthy food groups defined using the UK Department of Health nutrient profiling model. Results were adjusted for potential socio-demographic confounders. Final sample included 282,712 quarter-observations from 28,037 households.

**Results** Preliminary results show that in 2014, predicted average sugar content of daily purchases was 86.2 g per person (95%CI 85.3–87.0 g) in high-SEP, 87.3 g (95%CI 86.8–87.9 g) in mid-SEP, and 89.4 g (95%CI 88.7–90.2 g) in low-SEP households. By 2017, this had decreased by an average of 7.1 g per person (95%CI 6.8–7.4 g) with a greater decrease observed in low-SEP households (8.2 g, 95%CI 7.6–8.7 g) compared to mid-SEP (6.9 g, 95%CI 6.5–7.2 g) and high-SEP (6.5 g, 95%CI 5.9–7.0 g) households. This decrease is largely