

due to reductions in sugar purchased from less healthy food groups (incl. sugary drinks and table sugar), and was similar in magnitude across SEP households (-6.4 to -5.4 g). However, in 2017, the amount of sugar purchased from less healthy products which usually contain higher levels of added sugar was still 3.5 g (95%CI 2.7–4.3 g) higher in low-SEP compared to high-SEP households.

**Conclusion** There has been a 7.1 g per person per day reduction of total sugar purchased to take-home between 2014 and 2017. Relatively larger reductions were observed among low-SEP households. This means that by 2017, SEP differences in the total amount of sugar purchased were no longer statistically significant. However, low-SEP households continued to purchase greater amount of sugar from less healthy products in comparison to mid- and high-SEP households. Future work should identify if these changes are triggered by consumer behaviour and/or changes in products.

OP08

#### A DISCOURSE NETWORK ANALYSIS OF UK NEWSPAPER COVERAGE OF THE 'SUGAR TAX' DEBATE BEFORE AND AFTER THE ANNOUNCEMENT OF THE SOFT DRINKS INDUSTRY LEVY

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**Background** On 6th April 2018, the UK Government introduced the Soft Drinks Industry Levy (SDIL) as a policy designed to reduce population level sugar consumption and related illnesses. Given that the successful introduction of upstream food and nutrition policies is a highly political enterprise involving multiple interested parties, understanding the complex network of stakeholders seeking to influence such policy decisions is imperative.

**Methods** Media content analysis was employed to build a dataset of relevant articles from UK national newspapers. These articles were analysed to identify stakeholder agreement or disagreement with defined concept statements. Discourse network analysis enabled us to produce visual representations of the network of stakeholders and coalitions evident in the debate, in the months leading up to and following the announcement of the SDIL (May 2015 to November 2016).

**Results** Coding identified 3,883 statements made by 214 individuals from 176 organisations, relating to 47 concepts. Network visualisations revealed a complex network of stakeholders with opposing and supporting policy coalitions. Polarisation of stakeholders arose from three key factors: (i) differences in political ideology influencing the acceptability of policy options; (ii) position on a specific policy intervention; and (iii) interpretation of the evidence supporting the policy option. Industry stakeholders appeared less united in the network before the SDIL announcement, compared with the later period. Some key industry actors appeared in the supportive coalition, possibly due to the use of corporate social responsibility rhetoric. Jamie Oliver appeared as a dominant stakeholder, firmly embedded with public health advocates, suggestive of his role as a policy entrepreneur.

**Conclusion** This study highlights the complexity of the network of stakeholders involved in the public debate on food policies such as sugar tax and the SDIL. Public health advocates seeking to gain support for future upstream regulation

to promote population health would benefit from tailoring their communication to take advantage of sources of polarisation. Vocal celebrity policy entrepreneurs may be instrumental to facilitate alignment of stakeholders around a clear ideology.

OP09

#### IMPACTS OF POST-BREXIT AGRICULTURAL POLICY ON FRUIT AND VEGETABLE INTAKE AND CARDIOVASCULAR DISEASE IN ENGLAND: A MODELLING ANALYSIS

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**Background** Brexit might produce a new agricultural regime in the UK. The current Agriculture Bill, which will shape this regime, aims to provide financial assistance for the delivery of environmental aims. However, the current Bill may represent a missed opportunity to positively influence food systems and improve public health. Potential health-improving measures could include expanding the UK production of fruits and vegetables (F&V), thus increasing F&V availability and affordability. Currently, only 1.4% of total agricultural land in England is allocated to F&V. This study aims to estimate the potential impacts of allocating additional land to F&V production on F&V intake and associated cardiovascular disease (CVD) and inequalities in England between 2021 and 2030.

**Methods** We used the previously validated IMPACT Food Policy model. We translated changes in land allocated to F&V into changes in F&V intake and associated CVD mortality, expressed in number of deaths prevented or postponed by age group, sex, and Index of Multiple Deprivation (IMD) quintile. The model combined publicly available data on agricultural land use and quality, F&V supply, waste, purchases and IMD-stratified intake, IMD-stratified CVD projections, and appropriate relative risks. We modelled two scenarios that assumed a linear increase in agricultural land allocated to F&V between 2021 and 2027 (the implementation period of the new policy) until it covers (a) 10% and (b) 20% of all high quality land suitable for production of horticultural crops in England. We assumed that F&V prices would drop to a new market equilibrium. We used Monte-Carlo simulations to produce uncertainty intervals.

**Results** Our model suggested that by 2030, fruit intake might increase by approximately 4% (95% Uncertainty Interval: 2%-7%) and vegetable intake by approximately 8% (4%-13%) under the first scenario. Under the second scenario, fruit intake could increase by approximately 17% (10%-29%) and vegetable intake by approximately 37% (26%-51%). These increases in F&V intake might prevent or postpone approximately 3,360 (1,760–5,920) CVD deaths under the first scenario and 15,700 (9,000–24,310) CVD deaths under the second scenario, between 2021 and 2030. Our modelled scenarios could also reduce inequalities, with some 16% of these fewer deaths occurring in the most affluent group compared with 22% in the most deprived group.

**Conclusion** Policymakers should urgently consider the public health impacts of the post-Brexit agricultural regime in England. Increasing the land allocated to F&V production could substantially reduce the burden of CVD and associated inequalities.