the models developed by Hall and colleagues (2011) and data from the 1990 Canadian Health Promotion Survey.

Results Our analysis identifies a 95.8 kilocalorie per capita per day increase in caloric intake after CUSFTA in Canada compared with the synthetic control. These changes coincided with a $1,820 million (95% CI: 1,179.2 to 2,464.1) increase in US investment in the Canadian food and beverage sector, and a $5,258.3 million (95% CI: 4,894.8 to 5,621.8) rise in food and beverage imports from the US. This estimated rise in caloric intake corresponds to an average individual weight gain of 5.7 kg for women and 5.1 kg for men aged 40 and with low physical activity levels, or 2.3 kg for women and 2.2 kg for men aged 40 and who are very active.

Conclusion Our findings suggest that US FTA can substantially alter dietary behaviour by increasing caloric intake. FTA negotiations may be a critical window for shaping dietary behaviours to prevent overnutrition, obesity and related diseases.

Neighbourhoods and communities

OP77 EVALUATING THE ASSET MODEL: FINDINGS FROM A RAPID REVIEW OF EVALUATION STRATEGIES

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Background Lone parents experience poorer health and socioeconomic disadvantage compared to coupled parents. The UK Government has restricted access to Income Support, the primary income replacement benefit for lone parents. Under Lone Parent Obligations (LPO), lone parents are transferred from Income Support to Jobseeker’s Allowance once their youngest child reaches an age threshold (which has been reduced incrementally), and they must prove they are actively seeking work or face sanctions. We investigated the effects of introducing LPO on the health of lone mothers in the UK.

Methods We analysed 2009–2013 data from Understanding Society, a panel study representative of the UK general population. Our primary outcome was the mental health component of SF-12, with the physical health component and self-rated health assessed as secondary outcomes. We identified two intervention groups: lone parents newly exposed following the cut-off change from seven to five years and from ten to seven years. Each of these intervention groups were compared to two control groups: remaining unexposed (since the youngest child was older than the existing cut-off), and already exposed (since the youngest child was below the age cut-off). We estimated a pooled LPO effect to increase precision. We conducted a difference-in-difference analysis using linear regression to estimate the ‘intention to treat’ causal effect, adjusting for maternal age, number of children and maternal education. Multiple imputation was used to address item missingness.

Results Our primary analysis included a total of 2,257 participants. Mental health of lone parents consistently declined in intervention groups compared to control groups, whereas physical health and self-rated health showed little change. For lone parents with children aged 5–7 years who were newly exposed, the mental health score of SF-12 changed by −1.39 (95% CI −4.08, 1.29) compared to those unexposed and −2.29 (95% CI −4.57, 0.00) compared to those remaining exposed. Equivalent figures for the cut-off change from 10–7 years were −2.45 (95% CI −5.48, 0.57) and −1.28 (95% CI −4.00, 1.45), while for the pooled effect were −2.13 (95% CI −4.17, −0.10) and −2.21 (95% CI −4.13, −0.30). A complete case analysis and inclusion of males within the analytical sample led to similar results.

Discussion Increasing conditionality attached to the receipt of welfare benefits adversely impacted mental health of lone mothers but had no short-term impacts on physical health. Our study had limited statistical power and was only able to investigate short-term effects, but the pattern of findings was consistent across comparison groups. Planned extensions to LPO should be reconsidered.