Diet, physical activity, and sleep in relation to furlough during the COVID-19 pandemic in the UK: evidence from eight longitudinal studies Jane Maddock

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The recent Covid-19 pandemic, and its mitigations, are expected to have long-term consequences on the health and health behaviours. In an effort to reduce the effect of lockdown on the economy, the UK government launched their Coronavirus Job Retention Scheme (commonly known as furlough) in March 2020, which entitled employees who were unable to work to 80% of their monthly pay up to a cap of £2,500. We investigated the association between changes in economic activity and health behaviours of the working-age participants of eight longitudinal studies, during the early

stages of the pandemic. Specifically, we investigate the postpandemic levels, and the pre-to-post pandemic change, in fruit and vegetable consumption, physical activity, and sleeping patterns. We obtained study-specific estimates using modified Poisson regression, adjusting for a comparable set of potential confounders, and combined results in a random-effects metaanalyses. Compared to those who continually worked, furloughed workers were more likely to report an increase in their fruit and vegetable consumption (1.22 [1.04-1.43]; I2 =52%), and an increase in their physical activity (1.19 [1.04-1.35]; I2 = 73%). However, furlough appears to have a polarizing effect on sleeping patterns (change from 6 - 9h to outside this range: 1.46 [1.03, 2.08]; I2 = 75%; change from outside of the 6 -9 h to within this range: 1.78 [1.03, 3.07]; I2 = 75%), especially amongst women and those with no higher education degree. This polarization is partially explained by the age of the survey participants, indicating that sleeping patterns of the younger cohorts were more adversely affected. Furlough schemes may be associated with better diet and more physical activity, while inconsistent effects on sleeping patterns may place younger generations at particular risk of atypical sleep.