

Supplementary data

Table S1: Sensitivity analyses for underreporting: Dietary intake during the COVID-19 pandemic in 2020 compared to pre-pandemic intake, excluding participants with underreported records (n=17)

| Outcome (Dietary intake) | Crude Model | | Adjusted Model | |
|---|-----------------------|----------|-------------------------|---------------|
| | β (CI) | <i>p</i> | β (CI) | <i>p</i> |
| Difference in total energy intake (kcal) ¹ | | | | |
| Pandemic | 20.47 (-42.49; 83.43) | 0.5199 | -95.77 (-163.68; 27.85) | 0.0063 |
| Pre-pandemic (reference group) | 0 | | 0 | |
| Difference in fat intake (%E) ² | | | | |
| Pandemic | 0.44 (-1.10; 1.98) | 0.5736 | 0.26 (-1.30; 1.81) | 0.7446 |
| Pre-pandemic (reference group) | 0 | | 0 | |
| Difference in protein intake (%E) ³ | | | | |
| Pandemic | 0.11 (-0.51; 0.74) | 0.7229 | 0.08 (-0.57; 0.73) | 0.8099 |
| Pre-pandemic (reference group) | 0 | | 0 | |
| Difference in carbohydrate intake (%E) ² | | | | |
| Pandemic | -0.57 (-2.20; 1.05) | 0.4833 | -0.32 (-1.96; 1.32) | 0.6973 |
| Pre-pandemic (reference group) | 0 | | 0 | |
| Difference in Free sugar intake (%E) ⁴ | | | | |
| Pandemic | -0.00 (-1.25; 1.24) | 0.9925 | -0.51 (-1.81; 0.80) | 0.4442 |
| Pre-pandemic (reference group) | 0 | | 0 | |
| Difference in Food group intake (g/1000kcal) | | | | |
| Ultra processed foods ¹ | | | | |
| Pandemic | 4.36 (-16.78; 24.50) | 0.6824 | -5.54 (28.19; 17.12) | 0.6278 |
| Pre-pandemic (reference group) | 0 | | 0 | |
| Fruits and vegetables ¹ | | | | |
| Pandemic | -4.52 (-22.05; 13.00) | 0.6087 | 1.92 (-16.76; 20.59) | 0.8386 |
| Pre-pandemic (reference group) | 0 | | 0 | |
| Sugar sweetened beverages ⁵ | | | | |
| Pandemic | 0.77 (-17.50; 19.04) | 0.9331 | -11.25 (-30.16; 7.67) | 0.2400* |
| Pre-pandemic (reference group) | 0 | | 0 | |
| Juices ⁶ | | | | |
| Pandemic | 4.78 (-10.76; 20.31) | 0.5426 | 5.89 (-9.82; 21.59) | 0.4583* |
| Pre-pandemic (reference group) | 0 | | 0 | |

Comparison of dietary intake during the COVID-19 pandemic in 2020 (15th march – 11th august in Dortmund, Germany) and pre-pandemic intake (One (n=85) or two (n=6) years before the start of the COVID-19 pandemic in March 2020) were tested using polynomial mixed-effects regression models; significant p-values of the adjusted models are marked bold; Crude models include predictor (pandemic (yes/no)), outcome (dietary variable) and are adjusted for sex (male/female).¹Model contains a random statement for the family level with an unstructured covariance structure and a random statement for the person level with an unstructured covariance structure. Adjusted models are adjusted for sex (male/female), age (years) and season (summer/autumn/winter/spring).²Model contains a random statement for the family level with an unstructured covariance structure. Adjusted models are adjusted for sex (male/female) and age (years).³Model contains a random statement for the family level with an unstructured covariance structure. Adjusted models are adjusted for sex (male/female), maternal employment (yes/no), overweight status of the participant (yes/no), season (summer/autumn/winter/spring) and age (years).⁴Model contains a random statement for the family level with an unstructured covariance structure and a repeated statement for the person level with a spatial exponential covariance structure. Adjusted models are adjusted for sex (male/female), season (summer/autumn/winter/spring) and age (years).⁵Model contains a random statement for the family level with an unstructured covariance structure. Adjusted models are adjusted for sex (male/female), age (years), maternal high education (yes/no), season (summer/autumn/winter/spring).⁶Model contains a random statement for the family level with an unstructured covariance structure and a repeated statement for the person level with an unstructured covariance structure. Adjusted models are adjusted for sex (male/female) and age (years). *Residuals of the final models are not normal distributed