



HOW DID THE COVID-19 PANDEMIC IMPACT INTAKES OF SODIUM, SATURATED FATS, AND FREE SUGARS IN QUÉBEC, CANADA? PRELIMINARY FINDINGS FROM THE NUTRIQUÉBEC PROJECT.

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Purpose: The COVID-19 pandemic led to multiple disruptions, resulting in small acute changes in lifestyle habits, including diet. However, longer term changes remain mostly undocumented. The purpose of this study was to examine changes in intakes of sodium, saturated fats (SFA), and free sugars between the pre-pandemic, pandemic, and post-pandemic periods among adults in Québec, Canada.

Methods: Data from the longitudinal NutriQuébec project were used. Periods were defined as pre-pandemic (06-19-2019 to 03-13-2020), pandemic (03-13-2020 to 03-12-2022), and post-pandemic (03-13-2022 to 03-12-2024). Dietary intakes were derived from multiple web-based, 24-hr dietary recalls across periods (n=1 to 12 per respondent in total). The distributions of usual intakes for sodium (mg), SFA (%E), and free sugars (%E) were estimated using the National Cancer Institute's multivariate Markov Chain Monte Carlo method with models stratified by sex. Sex-specific data were combined to observe differences between periods using survey-specific regression models adjusted for age. Statistical weights were used to ensure population representativeness for age, sex, and region (metropolitan area of census or not).

Results: Data from 3327 adults were analyzed. Sodium ($\beta=-60.2$, 95%CI: -375.1, 254.8) and SFA ($\beta=-0.71$, 95%CI: -1.44, 0.02) intakes tended to be lower during the pandemic period compared with the pre-pandemic period, whereas free sugars intakes tended to be higher ($\beta=0.44$, 95%CI: -0.75, 1.63). When comparing the pandemic and post-pandemic periods, sodium intakes tended to further decrease compared with the pandemic period ($\beta=-80.8$, 95%CI: -527.7, 366.0), whereas intakes in SFA ($\beta=0.40$, 95%CI: -0.57, 1.32) and free sugars ($\beta=1.06$, 95%CI: -1.72, 3.83) tended to increase. As such, the trajectory of intakes across all periods was constantly and modestly downward for sodium, constantly upward for free sugars, and U-shaped for SFA. None of the observed changes reached statistical significance.

Conclusions: These preliminary findings from the NutriQuébec project revealed no clear change in the intake of nutrients of public health concern from the pre-pandemic to the pandemic and post-pandemic periods in Québec, Canada. Additional analyses are required to replicate and extend these findings.