



CAN A DIETARY PATTERN HIGH IN ULTRA-PROCESSED FOODS BE OF HIGH NUTRITIONAL QUALITY? – PRELIMINARY FINDINGS FROM THE NUTRIQUÉBEC PROJECT

Rochette M, Laramée C, Lapointe A, Charest A, Giguère I, Plante C, Lemieux S, Desroches S, Bélanger-Gravel A, Carbonneau E, Lamarche B

Background: There is yet no consensus on whether all ultra-processed foods (UPFs) are concerning for health. Specifically, the extent to which diets high in UPFs, but with an adequate nutrient profile are compatible with overall diet quality remains uncertain.

Aims: This study evaluated if a dietary pattern high in UPFs can be aligned with an overall high diet quality among adults of the province of Québec, Canada.

Methods: Data from 6,334 adults recruited in the NutriQuébec project and having completed 24-h recalls between 2019 and 2025 were used. Participants were categorized into four groups based on consumption of NOVA-classified UPFs (lowUPF or highUPF using the median in %E) and intake of saturated fats (SFA), free sugars and sodium (SFSS, high if above targets for ≥ 2 nutrients). Diet quality was estimated using the Healthy Eating Food Index (HEFI-2019, /80 points). Data were calibrated for sex, age and region of residence to reflect distribution among the adult Québec population.

Results: After adjustment for covariates, the highUPF/lowSFSS group (9.3% of the total sample, 59.3%E as UPFs) had a mean HEFI-2019 score of 48.9 points (95%CI 47.5-50.3). This score was 4.8 points higher than in the lowUPF/highSFSS group and 9.2 points higher than in the highUPF/highSFSS group, but 5.6 points lower than in the lowUPF/lowSFSS group (all $p < 0.0001$). The highUPF/lowSFSS group had relatively low intakes of sodium (2428mg 95%CI 2234-2622) and SFA (9.3%E 95%CI 8.6-10.1%), but intake of vegetables and fruits (3.6 servings 95%CI 3.2-3.9) was lower than in the lowUPF/lowSFSS and lowUPF/highSFSS groups (-2.5 and -1.2 servings respectively, $p < 0.0001$).

Conclusions: Among adults in Québec, a dietary pattern rich in UPFs with relatively low intake of SFSS is associated with a relatively good diet quality, despite being characterized by lower consumption of vegetables and fruits. This pattern is however quite uncommon in the population.

Keywords: Ultra-processed foods, diet quality