

Changes in Food Purchasing Practices of French Households During the First COVID-19 Lockdown and Associated Individual and Environmental Factors

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Objectives: This study aimed to explore changes in food purchasing practices (FPP) of French households during the first COVID-19 lockdown and associations with individual and environmental factors.

Methods: In April of 2020 households from the Mont'Panier cross-sectional study (n = 306), a quota sampling survey conducted in the south of France, were asked to complete an online questionnaire about their FPP during lockdown and related factors, including perceived food environment (FE) (distance to closest food store, perception of increased food prices etc.). Objective FE (presence, number, proximity and density of food outlets) was assessed around participant's home using a geographical information system. Multiple correspondence analysis based on changes in frequency of use and quantity of food purchased by food outlet, followed by a hierarchical cluster analysis resulted in the identification of clusters. Logistic regression models were performed to assess associations between identified clusters and

household's sociodemographic characteristics, perceived and objective FE.

Results: Five clusters were identified. Cluster "Supermarket" (38% of the total sample), in which households reduced frequency of trips, but increased quantity bought in supermarkets during lockdown, was associated with lower incomes. Cluster "E-supermarket" (12%), in which households increased online food shopping, was associated with higher incomes. Cluster "Diversified" (22%), made up of households who reduced frequency of trips to diverse food outlet types, was associated with the perception of increased food prices. Cluster "Organic Food Store" (20%), in which households did not change frequency of trips, nor quantity purchased in organic food stores, was associated with being older (35–50 y vs < 35 y). Finally, cluster "Producer" (8%), including households who regularly purchased food from producers, but mostly reduced these purchases during lockdown, was associated with the presence of an organic food store within a 1-km walking distance around home.

Conclusions: This study highlighted diverse changes in FPP during lockdown and overall more significant associations with perceived than with objective FE indicators.

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