

Title: Perceptions of price and store availability of fruit and vegetable and their associations with fruit and vegetable intake among adults in four South American cities

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Background and Objectives:

Sufficient intake of fruits and vegetables(FV) has been associated with a reduced risk of chronic diseases and body weight management. South American(SA) diet is characterized by low intakes of FV. There is growing evidence, from developed countries, that consumer nutrition environment is an important determinant of dietary behavior.

We investigated the perceptions about FV availability and price in local food stores and their associations with FV's intake among adults in the following cities: Bariloche, Marcos Paz (Argentina), Temuco (Chile) and Canelones (Uruguay).

Methods:

- We examined data of 5009 men and women, aged 40-80y, participating in the CESCAS (Centro de Excelencia en Salud Cardiovascular del Cono Sur) I Study, a population-based prospective cohort.
- Perception about the store consumer nutrition environment was measured using the Perceived Nutrition Environment Measurement Survey(NEMS-P) and FV intake with a Food Frequency Questionnaire.
- Linear and logistic multivariate regression analyses were conducted to assess associations between the perceived environment and FV consumption (mean intake and frequency of ≥ 5 servings/d) adjusting for sex, age, city, education and perceived food insecurity.

Results:

- Average FV intake was 2.5 servings/d; only 7.5% reached ≥ 5 servings/d.

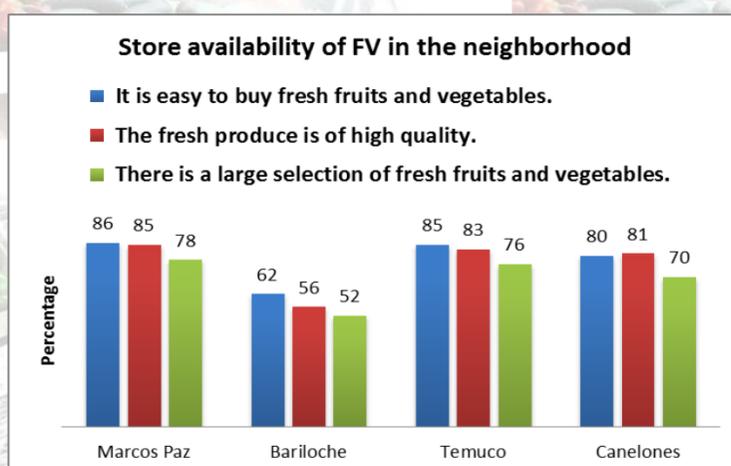


Fig 1. Perception of store availability of fruits and vegetables in the neighborhood (agree/strongly agree with the statements)

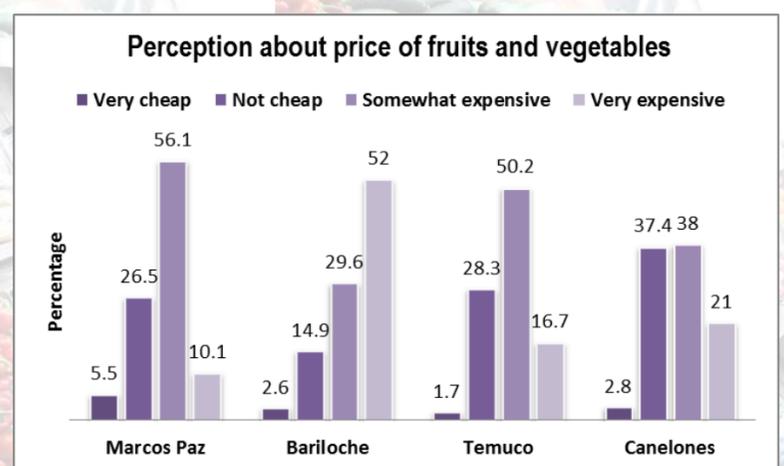


Fig 2. Perception about price. (At the store where you buy most of your food, how would you rate the price of fresh fruits and vegetables?)

- Adjusting for covariates, those with better perceptions about FV store availability reported a slight difference in FV intakes (difference: + 0.28 servings/d, 95%CI: 0.19;0.36) and more frequently reached ≥ 5 servings/d (OR:1.40, 95%CI: 1.17;1.76).
- Price's perceptions were not associated with FV consumption.

Conclusions:

Most of the participants had positive perceptions about FV availability, quality and large selection in local food stores, and that was independently associated with higher FV consumption.

Most of the adults had a negative perception about price of these foods, however, that perception wasn't significantly associated with FV intakes.

This information contributes to the knowledge of nutrition consumer environments in SA and their relation with diet behaviors.

Keywords: Consumer Nutrition Environment, Fruit and vegetable, Diet, Price, South America

Conflict of Interest: None

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