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## Evaluation of Fruit and Vegetable Consumption as Phytonutrient Potential in Lebanon

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### Abstract

Fruits and vegetables (FV) are known to contain considerable amounts of vitamins and minerals in addition to phytonutrients and bioactive compounds having many positive health effects in the prevention of diseases such as cardiovascular illnesses, cancer, etc. Therefore, it is crucial to evaluate the FV consumption as sources of phytonutrients of the Lebanese population. A cross sectional analysis of 390 Lebanese individuals aged between 20 and 65 years old located in six Mohafazat (Beirut, Mount Lebanon, North, South, Nabatieh and Bekaa), was conducted. Sociodemographic, lifestyle, eating behaviour, food frequency questionnaire (FFQ) and awareness information were collected through a questionnaire specifically adapted for the purpose of the study. Statistical analysis was carried out and multivariate models were used in order to evaluate the association between fruits and vegetables consumption and different independent factors. The FV consumption among the Lebanese population was acceptable compared to the international recommendations. Regarding vegetables, 38.5% of the Lebanese respondents, showed a high level of consumption versus 37.98% having a low level of consumption. Related to fruit consumption, 38.08% Lebanese respondents consuming high levels of fruits compared to 36.54% of the Lebanese respondents, showing a low fruits intake. Furthermore, it was observed that the majority of the study population was highly aware of the importance of phytonutrients in FV and were willing to consume these food items more and more, 49.23% of the Lebanese population. The FV consumption was the most associated with the area of residence, age, education level, work, salary ranges, weight loss diet, physical activity, smoking, supplement intake the monthly amount of money spent on food and consumptions of starch, dairy products, meat, herbs and juices. The findings stated that the consumption of FV in Lebanon is acceptable, even though it is affected by several socio demographic and lifestyle factors. Future governmental or national programs and interventions could be settled to encourage and increase the FV consumption among all the population age levels and areas of residence.

**Keywords:** Awareness, bioactive compounds, fruit, health, phytonutrients, vegetable