Study of Adherence to Mediterranean Diet (MEDAS) In Lebanese Families

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Abstract

Under the scope of the PRIMA funded project: 'Switching Mediterranean Consumers to Mediterranean Sustainable Healthy Dietary Patterns' (SWITCHtoHEALTHY-GA 2133), in 2022, Consumers Lebanon conducted a door-to-door survey to assess the rate of adherence to the Mediterranean diet (MEDAS) among 209 Lebanese families from different socio-economical levels. Concerning Mediterranean diet adherence screener, the results show that 78% of this population use olive oil as the principal source of fat for cooking, more than 60% consume at least 2 portions of vegetables and 3 pieces of fruit per day. The MED populations enjoy a better health, 77%, 93% and 85%, respectively do not have chronic diseases, cardiovascular diseases, and diabetes compared to 75%, 88% and 89%, respectively in the general population.

After calculation the target variable 'score' of 14 questions for each person, the study found that 56% of this population does not have adherence to the Mediterranean Diet and 44% does have.

Keywords: Lebanon, Consumer, Diet, Disease, Medas.

Problem Statement

This study was carried out within the scope of the European Union - PRIMA funded project titled 'Switching Mediterranean Consumers to Mediterranean Sustainable Healthy dietary patterns' and numbered as SWITCHtoHEALTHY-GA 2133.

Research questions and objective

The objective of the study is to generate information and data to evaluate the a) adherence of children and adults to Mediterranean Diet, b) consumers' behaviour towards Mediterranean Diet, c) family relationships that interact with Mediterranean Diet and d) Mediterranean lifestyle habits.

The survey assessed the rate of adherence to the Mediterranean diet (MedDiet) among Lebanese families and it is benefits on human health and well-being when combined with a healthy lifestyle.

The results will serve to design and develop adequate strategy to promote and increase the adherence to the Mediterranean Diet in Lebanon.

Methods

A cultural adapted questionnaire in Arabic language, composed of 3 sections and 59 questions was developed based on a common questionnaire developed for the partners countries in the project. The questionnaire was prepared to provide information specified in the project objectives and based on internationally accepted indexes.

The international index used in the survey is: MD Adaptation Screening (MEDAS index) to assess the adherence of MedDiet of families.

A suitable sample of 209 households, distributed proportionally on the eight governorates of Lebanon, was face-to face interviewed by trained interviewers form Consumers Lebanon association. The interview took approximately 30 minutes. The data collection period was conducted between July and October 2022.

The survey was approved for the ethical compliance by the project and according to the EU regulations. The participation in the survey was completely voluntary.

The data was statistically analysed by the R Program.

Data:

The survey consisted of the following sections:

1- **General information:** This section consists of 2 parts:

- The first part includes 13 questions and cover personal information and sociodemographic characteristics such as age, gender, income status, number of children. Anthropometric measurements of individuals (body weight, height) are also included in this part. Body weight and height was taken based on the declaration.

- The second part of the section includes of 24 questions and cover information on health status, eating habits, lifestyle, and digital tool use.

2- **Family relations:** includes 8 questions and cover familiar dietary habits at different mealtime such as eating together and sharing eating time with the family or alone, etc.

3- **MEDAS INDEX:** includes of 14 questions and cover the consumption of food such as olive oil, fruit and vegetable portions, margarine-butter and red meat, wine, cereals, fish-seafood, snacks, nuts, cake, tomato sauce with olive oil by patients in meals. A total score of 7 and above indicates that the individual has an acceptable degree of adherence to the MD, and a score of 9 and above indicates that the individual has a strict adherence to the MD (León-Munoz et al., 2012).

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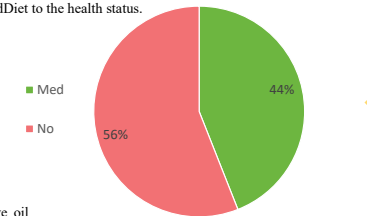
Results

Socio demographic characteristics and health

The data collected is equally divided between male and female, spread on 7 educational levels, the majority of the population with 35%. has university degree level. Even though that 44% of this population thinks that they have a good health, while looking at the BMI, only 40% of the population are considered healthy and 42% are overweight.

With three levels of income: "high, middle and low", the majority of the MED population with 73% has a low income, 25% has a middle income and 2% has a high income. That shows that the high-income population is not interested with the MedDiet.

77% of the MED population does not have chronic disease, 93% of the MED population doesn't have a cardiovascular disease, 85% of the MED population doesn't have diabetes. This reflects the importance of MedDiet to the health status.


- Med
- No

44%

56%

After summing up the results, a score <9 reflects poor adherence to the Mediterranean diet, a and more a score more than 9 describes good adherence.

78% of this population uses olive oil the principal source of fat for cooking.

69% of this population consumes at least 2 portions of vegetables per day, and 31% consumes less than 2.

60% of this population consumes at least 3 pieces of fruit per day and 40% consumes less than 3. Unlike the consumption of meat, the category at least 3 gives one point "which is good for the med score", in the other hand 0 point for the consumption less than 3.

Fruits and Vegetables consumption

40%

60%

- Less than 3
- At least 3
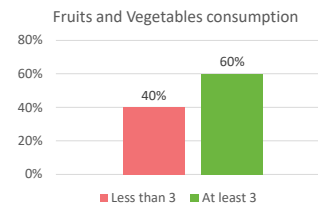
76% of this population consumes less than 1 piece of meat per a day, and 24% consumes at least one. The category less than one gives one point" which is good for the med score", in the other hand zero point is given at the consumption of less than 3 pieces.

Meat Consumption

24%

76%

- At least 1
- Less than 1
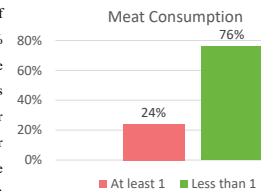
Conclusion

After calculation the total score of 14 questions for each person, are found 56% of this population does not have adherence to the Mediterranean Diet and 44% does have.