# The Connection Between Socio-Demographic Variable's and Eating Habits of College Student

<sup>1</sup>Esti- Engelchin- Nissan, <sup>2</sup>Ronitpinchas-mizrachi, <sup>3</sup>Michal Gillon

<sup>1,2,3</sup>Ramat-Gan college,Rotenberg 87, Ramat Gan Israel.

# Abstract

The Mediterranean diet is a model for healthy nutrition.

# A. The purposes of the research

Examining the relationship between religion, sex, occupation, age, and area of residence for Mediterranean dietary habits.

# **B.** Research Methods

Through the Gogol Forms service, we opened a questionnaire which we implemented as a link on the College Website. The questionnaire included questions about the Mediterranean diet and consisted of 14 multiple-choice questions. The questionnaire is reliable and valid. The nutrition questionnaire data was combined with the personal data of the students in the college's databases.

#### C. Results

In examining the relationship between the Mediterranean dietary index and the characteristics are shown, it was found that the student's mother tongue was statistically significant to the index. In addition, it was found that an increase in the level of the degree leads to a decrease in the values of the Mediterranean diet, while an increase in age leads to an increase in the values of a Mediterranean diet.

# D. Conclusions and Discussion

The tendency of immigrants from the former Soviet Union to Mediterranean food is higher than that of native Israelis born in the Mediterranean region. This interesting finding may indicate that dietary habits can be altered and are not necessarily inherent in childhood.

**Keywords -** *Mediterranean dietary habits, college students, socio-demographic variable's* 

# I. INTRODUCTION

Obesity is an epidemic that will increase morbidity and accelerate mortality in Western countries, which is a huge economic burden. According to the US Centers for Disease Control and Prevention, more than a third of adults in the United States are obese (1). Obesity is associated with some of the leading causes of death, including heart Disease, certain types of cancer, stroke, and type 2 diabetes. In a large-scale study of 67 countries, it was found that in countries with the low gross national product, an inverse association was found between low social status and obesity, while in countries with the high gross national product, there was a direct correlation between low social status and obesity (2). Studies conducted over the past 30 years in the developed countries have found that socioeconomic status is a risk factor for a series of classic risk factors, including lack of health-promoting behavior such as poor nutrition, smoking, excessive alcohol consumption, and lack of physical activity (3-5). There is an assessment that included behaviors that endanger health, explain about half of the relationship between socio-economic status and health (6). The relationship between a socioeconomic situation and a health-threatening behavior that requires financial investment, such as smoking and the consumption of sweets, is explained by the economic approach, which claims that the socioeconomic status of the individual is low and therefore more likely to endanger his health. Consumption, smoking, and lack of exercise during leisure time. The relationship between a socioeconomic situation and a health-threatening behavior that requires financial investment, such as smoking and the consumption of sweets, is explained by the economic approach, which claims that the socioeconomic status of the individual is low and therefore more likely to endanger his health. Studies conducted over the past 30 years in developed countries have found that socioeconomic status is a risk factor for a series of classic risk factors, including lack of health-promoting behavior such as poor nutrition and smoking (7,8).

Among the variables related to socioeconomic status, the strongest correlation was found between education and health behavior. Education increases human capital and develops the ability to control needs and desires, which reduces risk-taking behavior. Lack of means and knowledge may explain the relationship between socioeconomic status and some of the health-threatening behaviors (9-11). Adopting health behavior at a high socio- economic level is probably also due to the adoption of a new environment and social differentiation (12).

The Mediterranean diet is a model for healthy nutrition. It is based on plant, seasonal, local, fresh, and almost unprocessed food. The Mediterranean diet is characterized by high consumption of fruits, vegetables, bread and whole grains, legumes, nuts and seeds, and high consumption of olive oil. Dairy products are consumed in a moderate amount, especially goat's milk. Eggs, fish, and poultry are consumed in small to moderate quantities, and red meat is rarely used (13-14)

Various studies conducted in different populations have found that the Mediterranean diet has a beneficial effect on the quality of life, longevity, and primary and secondary prevention of major chronic diseases, including obesity, type 2 diabetes, cardiovascular disease, etc. (15).

# **II. MATERIALS AND METHODS**

# A. The purposes of the research

1. Examining the socio-demographic variables that predict the nutritional habits of college students.

2. Examining the suitability of the nutrition habits of the students at the College for Mediterranean Nutrition.

3. Examining the relationship between religion, sex, occupation, age, and area of residence for Mediterranean dietary habits.

# **B.** Research Methods

Through the Gogol Forms service, we opened a questionnaire which we implemented as a link on the College Website. The questionnaire included questions about the Mediterranean diet and consisted of 14 multiple-choice questions. The questionnaire is reliable and valid.

Upon completion of the questionnaire, each student received a voucher for purchasing food from the college cafeteria.

The student was able to choose from three options:

A cup of chopped vegetables

Snack energy

Borax/chocolate croissant

#### C. Steps in data processing:

1. Examination of the distribution of student selection data according to socio-demographic characteristics of the student (gender, marital status, occupation, education, curriculum, year of study, social section by place of residence, religion, year of study)

2. Examination of the distribution of data on the level of knowledge and attitudes regarding nutrition according to the student's socio-demographic distribution (gender, marital status, occupation, education, curriculum, year of study, social section by place of residence, religion)

3. Examination of the distribution of student selection data according to the level of knowledge and attitudes regarding nutrition

4. The relationship between the variable dependent on the student's behavior-consumption behavior and the independent variables-the socio-demographic characteristics of the student will be examined.

5. The relationships between the potential mediators are examined: the student's knowledge and attitudes to the dependent variable in the student's consumption behavior

# **III. PREPARATION OF TABLES**

#### A. Mediterranean Nutrition Index

The Mediterranean Dietary Index was calculated by summing the score (1 or 0) for each of the 15 relevant questions. The index can range from 0 points to 15 points. In practice, the index fluctuated between 1 and 12 points (M = 6.6, SD = 1.7).

#### B. The sample

The sample includes 215 students for a first or second degree. 81.4% (175) of them are female, and 18.6% (40) are male. Student's ages ranged from 19.8 to 61.6 years (M = 27.7, SD = 9.6).Most of the students study health (52.6%), a quarter of all students (26%) study nursing or Completion of a nursing degree. All the other students learn different professions of health. The vast majority of students (61%) speak Hebrew, 29% speak Arabic, and the others speak mainly Russian.

Characterization	category	%n (215)	
school year	First	(140) 64.8%	
	đ	((2) 28.70/	
	second Third and more	(62) 28.7% (13) 6.0%	
		(12) 0.011	
Field of Study	Nursing	(31) 14.4%	
	Completion of a nursing degree	(26) 12.1%	
	Other health professions	(113) 52.6%	
	Non-health field	(45) 20.9%	
Type of degree	First	(146) 67.9%	
51 8			
	second	(63) 29.3%	
	Preparatory courses	(6) 2.8%	
Native language	Hebrew	(132) 61.1%	
0 0	Arabic	(62) 28.7%	
	Russian	(8) 3.7%	
	Other	(2) 0.9%	
Nutrition course	Learn the course	(143) 66.2%	
	Did not learn the course	(73) 33.8%	
Mediterranean diet	yes	(19) 8.8%	
	No	(197) 91.2%	
The product	Borax/croissant	(73) 33.2%	
selected in the	Yogurt with granola	(102) 46.4%	
buffet	A glass of chopped	(45) 20.5%	
Junet	vegetables		

**Table 1 - Characteristics of Participants** 

## IV. RESULTS AND DISCUSSION

The distribution of students according to the lifestyle of a Mediterranean diet was examined in relation to the characteristics of gender, age, year of study, academic degree, the field of study, and Language of study. The findings are presented in Table 2.

# Table 2 - Distribution of students according to thelifestyle of a Mediterranean diet in relation tocharacteristics: gender, age, academic year, academicdegree, the field of study.

Charact	Charact category Mediterranea Significa						
erizatio	cutegory	n diet	Significance				
n		ii uict					
Gender							
Genuer	Male (n=40) M=6.7, SD=1.7		t(213)=-0.568				
	Female	M=6.6, SD=1.7	1(213)=-0.500				
	(n=175)	WI=0.0, SD=1.7					
age	(11-175)	r=0.247**	t(212)=1.087				
school		1-0.2+7	1(212)=1.007				
	First (140)		F(2,212)=0.99				
year	Second (62)		2				
	Third and more						
	(n=13)						
Field of	(11-13)						
Study	Nursing (31)	M=6.8, SD=2.0	F(3,209)=2.23				
Study	Completion of	M=0.0, SD=2.0 M=7.2, SD=1.8	6				
	a nursing	M-7.2, 5D-1.0	Ũ				
	degree (26)						
	Other health	M=6.3, SD=1.6					
	professions(11	,					
	3)						
	Non-health	M=6.7, SD=1.7	1				
	field(45)						
Type of							
degree	BA (n=144)	M=6.5, SD=1.7	t(205)=0.008				
Ŭ	MA (n=71)	M=6.5, SD=1.8					
Native							
languag	Hebrew		F(2,199)=12.1				
e	(n=130)		45*				
	Arabic (n= 62)						
	Russian or						
*n <0.05 **	other $(23)$						

\*p<0.05 , \*\*p<0.01

In examining the relationship between the Mediterranean dietary index and the characteristics shown in Table 2, it was found that the student's mother tongue was statistically significant to the index (F (2,199) = 12.145, p <0.05). The highest average was found among Russian (or other) speakers (M = 7.9, SD = 1.7) compared to Hebrew speaking students (M = 6.5, SD = 1.7) and Arabic speakers (M = 6.3, SD = 1.6). Hebrew and Arabic speakers achieved average index scores while Russian speakers achieved a higher than average.

The prediction of the variable 'Mediterranean diet' by the forecasters (training in the course, lifestyle, pedagogical year, track, language, gender, and degree) yielded two distinct models in the Stepwise method:

Table 3.Regression in the steps to predict the score of a Mediterranean diet among students at the Academic College according to socio-demographic characteristics and nutritional characteristics.

	variable	F	R <sup>2</sup>	$\Delta R^2$	β
Step 1	age	12.915**	6.2%		.3450
Step 2	Degree	8.602**	8.1%	1.9%	0.169

P<0.01\*\*

The findings demonstrate a significant model in two steps (F (2,196) = 8.602, p <.01), which includes the forecaster's age and degree alone. The forecasters are able to account for approximately 8% of all changes in the Mediterranean diet, with 6% being explained by student age ( $\beta = .3445$ ), and approximately 2% are explained by the level of degree the student is studying ( $\beta = -169$ ). The significance of the finding is that an increase in the level of the degree (permanent age) leads to a decrease in the values of the Mediterranean diet while an increase in age (a degree held constant) leads to an increase in the values of a Mediterranean diet.

#### **V. CONCLUSIONS**

The Israeli Ministry of Health website recommends a Mediterranean diet (16). The Mediterranean diet has many advantages that are expressed in 4 dimensions: The health dimension, the environmental dimension, the social and cultural dimension, and the economic dimension. Several interesting findings emerge from this study: The tendency of immigrants from the former Soviet Union to Mediterranean food is higher than that of native Israelis born in the Mediterranean region. This interesting finding may indicate that dietary habits can be altered and are not necessarily inherent in childhood. Another interesting finding was that there was no correlation between the student's choice of food and the Mediterranean diet. This finding may indicate that individuals in society sometimes make momentary decisions about which foods they want to consume regardless of their lifestyle. The third finding shows that as the age of the student increases, his tendency to consume more Mediterranean menu increases. This finding makes sense because the older the person is, the more he understands that he has to be more careful about food habits to maintain normal health.

#### ACKNOWLEDGMENT

Thanks to Ramat Gan College for funding the research

#### REFERENCES

 U.S. Centers for Disease Control and Prevention, Prevalence of Obesity in the United States, 2009-2010 (Atlanta: U.S. Centers for Disease Control and Prevention, 2012), accessed at www.cdc.gov/nchs/data/databriefs/db82.pdf, on Sept. 27, (2013).

- [2] Fred C. Pampel, Justin T. Denney, and Patrick M. Krueger, Obesity, SES, and Economic Development: A Test of the Reversal Hypothesis, Social Science and Medicine, 74(7) (2012) 1073-81
- [3] Panagiotakos DB, Pitsavos CE, Chrysohoou CA, Skoumas J, Toutouza M, Belegrinos D, Toutouzas PK, Stefanadis C., The association between educational status and risk factors related to cardiovascular disease in healthy individuals: the ATTICA study. Ann Epidemiol , 14 (2004) 188-194.
- [4] Paeratakul, S, Lovejoy JC, Ryan DH, Bray GA. The relation of gender, race, and socioeconomic status to obesity and obesity comorbidities in a sample of US adults. Int J ObesRelatMetabDisord, 26 (2002) 1205-1210.
- [5] Watt HC, Carson C, Lawlor DA, Patel R, Ebrahim S., Influence of life course socioeconomic position on older women's health behaviors: findings from the British Women's Heart and Health Study. Am J Public Health, 99 (2009) 320-327
- [6] Woitas-Slubowska D, Hurnik E, Skarpańska-StejnbornA.Correlates of smoking with socio-economic physical act status, leisure time vity, and alcohol consumption among Polish adults from randomly selected regions. Cent Eur J Public Health18 (2010) 179-185.
- [7] Cutler DM, Lleras-Muney A. ESchoeni RF, House JS, Kaplan GA, Pducation and health: evaluating theories and evidence. In: ollack H, editors. Making Americans Healthier: Social and Economic Policy as Health Policy. New York: Russell Sage Found, (2008) 29-60

- [8] Cutler DM, Lleras-Muney A. ESchoeni RF, House JS, Kaplan GA, Pducation and health: evaluating theories and evidence. In: ollack H, editors. Making Americans Healthier: Social and Economic Policy as Health Policy. New York: Russell Sage Found; (2008) 29-60.
- [9] Mirowsky J, Ross CE. Life-course trajectories of perceived control and their relationship to education, Am. J. Sociol. 112 (2007) 1339-1382.
- [10] Pampel FC, Krueger PM, Denney J. Socioeconomic Disparities in Health Behaviors. Annu Rev Sociol, 36 (2010) 349-370
- [11] Viscusi WK, Hakes JK. Risk beliefs and smoking behavior. Econ. Inq., 46 (2008) 45-59.
- [12] Cockerham WC Health lifestyle theory and the convergence of agency and structure, J Health SocBehav, 46 (2005) 51-67.
- [13] Trichopoulou A, Lagiou P., Healthy traditional Mediterranean diet: an expression of culture, history, and lifestyle. Nutr Rev. 55 (1997) 383-9.
- [14] Bach-Faig A, Berry EM, Lairon D, Reguant J, Trichopoulou A, Dernini S, Medina FX, Battino M, Belahsen R, Miranda G, Serra-Majem L; Mediterranean Diet Foundation Expert Group. Mediterranean diet pyramid today. Science and cultural updates. Public Health Nutr,14 (2011)2274-84.
- [15] Schröder H. Protective mechanisms of the Mediterranean diet in obesity and type 2 diabetes. J NutrBiochem, 18 (2007)149-60.
- [16] https://www.health.gov.il/PublicationsFiles/mediterranean\_diet.pdf