

How Healthy Is Your Food? Evidence from Jordan

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Abstract

This study investigated whether Jordanians care about eating healthy food. To achieve the objective of the study, a questionnaire was distributed to 300 persons. Chi-square test and t-test were used for analysis. Based on the answers of 261 respondents, we found that Jordanians in general do show a statistically significant care about how healthy is their food. In specific, the results indicated that Jordanians concern about eating fruits and vegetables, the amount of fat, added sugar and calories in their food in a statistically significant manner. On the other hand, the results showed that Jordanians do not show a statistically significant concern about the amounts of preservatives and colorings added to their food and whether it is natural or manufactured or plant or animal sourced.

Keywords: healthy food, Jordan, Chi-square test, t-test

1. Introduction

Good nutrition is one of the critical elements in order to have a healthy body and prevent diseases. Early, in 1943, The United States Department of Agriculture (USDA) introduced a nutrition guide promoting the “Basic 7” food groups to help maintain nutritional standards under period of war (World War II) food rationing. In 1956, the USDA recommended its “Basic Four” food groups. These food groups were: vegetables and fruits, as excellent sources of vitamins C and A, and a good source of fiber, Milk as a good source of calcium, phosphorus, protein, riboflavin, Meat for protein, iron and certain B vitamins, Cereals and breads as good sources of iron, B vitamins and carbohydrates, in addition to sources of protein and fiber (USDA, 1956). Thereafter, In 1992 USDA had issued a food pyramid and divided it into six horizontal sections containing depictions of foods from each section’s food group. Starting down to up, the groups included first, bread, cereal, rice and pasta group. Second, fruits and vegetables group. Third, milk, yogurt and cheese group and at the same level meat, poultry, fish, dry beans, eggs, and nuts group. Fourth, fats, oils and sweets group (Huston, 1992). This pyramid was updated in 2005. The World Health Organization along with the Food and Agriculture Organization, published guidelines that can effectively be represented in a food pyramid relating to objectives to prevent obesity, chronic diseases and dental caries based on meta-analysis (WHO/FAO, 2003; Moynihan & Petersen, 2004). The current nutrition guide worldwide is “MyPlate” which is also issued by USDA in 2011. It is divided into sections of approximately 30 percent grains, 40 percent vegetables, 10 percent fruits and 20 percent protein, accompanied by a smaller circle representing dairy, such as a glass of milk or a yogurt cup (USDA, 2011).

In fact, several researchers worldwide examined the food choices of people. They argued that the food choices depends on education and income (Bhargava & Bhargava, 2004; Casagrande et al., 2007; Horodyski et al., 2010), race and ethnicity (Casagrande et al., 2007; Horodyski et al., 2010), age (Horodyski et al., 2010; Granner & Evans, 2011), prices (Turrell & Kavanagh, 2006; Wiig & Smith, 2008; Krølner et al., 2011), taste (Molaison, et al., 2005; Wiig & Smith, 2008; Krølner et al., 2011), cultural preferences (Willard, 2002; Johnson-Koszlow et al., 2011; Bryant et al., 2011), fast-food restaurants (Mikkelsen & Chehimi, 2007; Larson et al., 2009; Thornton et al., 2010; Ver Ploeg, 2010; An & Sturm, 2012), time to shop and cook meals (Rose & Richards, 2004; Jago et al., 2007; Wiig & Smith, 2008; Horodyski et al., 2010; Granner & Evans, 2011; Krølner et al., 2011).

The Jordanian evidence in this topic is poor. Do Jordanians know which foods are healthy, if yes, do they care about eating healthy food? Does this issue differ between people according to their different characteristics?

These are vital questions that we tried to answer in this research. To the best of author’s knowledge, this is the first study in Jordan that tackles such vital issue for human being life. The remaining of the study is organized as follows: Section 2 describes data and methodology, Section 3 reports the results of analysis. Section 4 concludes.

2. Data and Methodology

In order to survey whether people care about how healthy is their food, a questionnaire was used. It was distributed to 300 persons. The sample was chosen from the academic staff, administrative staff and students of Yarmouk University in Jordan. The sample included respondents of different educational backgrounds, different income levels and from different areas in Jordan. We received back the answers of 261 respondents. The response rate was 87%. Thereafter, SPSS was used for data analysis. In specific, descriptive statistics, Chi-square test and t-test were used to answer the study objectives. Table 1 shows the questionnaire of the study.

Table 1. The questionnaire of the study

<p>How Healthy Is Your Food? Evidence from Jordan</p> <p>Dear respondent: This questionnaire is designed to analyze whether Jordanians care about how healthy is their food. Information collected from each questionnaire will be used for academic purposes only and the responses will be treated with utmost confidentiality.</p> <p><i>Please tick in the spaces provided.</i></p> <p>PART 1: Demographic Characteristics</p> <p>1. Gender: Male <input type="checkbox"/> Female <input type="checkbox"/></p> <p>2. Age: 18-30 <input type="checkbox"/> 31-40 <input type="checkbox"/> 41-50 <input type="checkbox"/> 51-60 <input type="checkbox"/> 61+ <input type="checkbox"/></p> <p>3. Educational Background <input type="checkbox"/> Uneducated <input type="checkbox"/> High school or below <input type="checkbox"/> Diploma <input type="checkbox"/> Bachelor <input type="checkbox"/> Higher education</p> <p>PART 2: Questions of the Study Please circle your answer.</p> <table border="0"> <tr> <td>Question 1: Do you concern about how healthy is your food?</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Question 2: Do you concern about the preservatives in your food?</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Question 3: Do you concern about the added artificial colors in your food?</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Question 4: Do you eat lots of vegetables for being healthier?</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Question 5: Do you eat lots of fruits for being healthier?</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Question 6: Do you care about the amount of fat in your food?</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Question 7: Do you care about the amount of added sugar in your drinks?</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Question 8: Do you care about the amount of calories in your food?</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Question 9: Do you care whether your food is plant or animal sourced?</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Question 10: Do you care whether your food is natural or manufactured?</td> <td>Yes</td> <td>No</td> </tr> </table> <p>Thank you.</p>			Question 1: Do you concern about how healthy is your food?	Yes	No	Question 2: Do you concern about the preservatives in your food?	Yes	No	Question 3: Do you concern about the added artificial colors in your food?	Yes	No	Question 4: Do you eat lots of vegetables for being healthier?	Yes	No	Question 5: Do you eat lots of fruits for being healthier?	Yes	No	Question 6: Do you care about the amount of fat in your food?	Yes	No	Question 7: Do you care about the amount of added sugar in your drinks?	Yes	No	Question 8: Do you care about the amount of calories in your food?	Yes	No	Question 9: Do you care whether your food is plant or animal sourced?	Yes	No	Question 10: Do you care whether your food is natural or manufactured?	Yes	No
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3. Results of Analysis

Table 2 reports the analysis of the demographic factors of the respondents. The results showed that 63% of the respondents were males while 37% of them were females. The age categories showed that 15% of the respondents were between 18 and 30 years old, 17% of them were between 31 and 41, 26% were between 41 and 51, 36% were between 51 and 61 and only 6% were above 60. The educational background results showed that none of the respondents were uneducated. 12% of them were a high school or less. 9% held diploma, 61% held a bachelor degree and 18% got higher education. Table 3 reports the frequencies of the respondents' answers. The results showed that 71% of the Jordanians do concern about how healthy is their food, while 29% do not. The results of question 2 showed that 42% of the respondents do care about the preservatives in their food. Only, 33% of the respondents do look at the artificial colorings added to their food. On the other hand, 62% and 59% of the respondents concern about eating vegetables and fruits respectively, for healthier bodies. 68% of the respondents concern about the amount of fat in their food. 73% of the respondents care about the amount of added sugar to their drinks. 81% of the respondents look at the amount of calories in their food. Only 11% of the respondents care about whether the origin of their food is plant or animal. 39% of them concern about whether their food is natural or manufactured.

Table 4 shows the results of the Chi-square statistic of the research questions. The results indicated that Jordanians significantly care about how healthy is their food. The "yes" answer was also statistically significant for questions 4-8 which means that Jordanians do significantly care about vegetables, fruits, amounts of fat, sugar and calories in their food. On the other hand there was no statistically significant care about the preservatives and colorings of food and whether the food is natural or manufactured or plant or animal sourced. Table 5 reports the t-statistic results of the research questions. The results were comparable to those based on the Chi-square statistic.

Table 2. The demographic characteristics of the respondents of the study

		Frequency	Percent	Valid Percent	Cumulative Percent
<i>Sex</i>	Male	165	63.2	63.2	63.2
	Female	96	36.8	36.8	100.0
<i>Age</i>	18-30	39	15.0	15.0	15.0
	31-40	44	16.9	16.9	31.9
	41-50	68	26.0	26.0	57.9
	51-60	94	36.0	36.0	93.9
	60 or more	16	6.1	6.1	100.0
<i>Educational Background</i>	High School	31	12.0	12.0	12.0
	Diploma	24	9.0	9.0	21.0
	Bachelor	159	61.0	61.0	82.0
	Higher Education	47	18.0	18.0	100.0

Table 3. Frequencies of respondents answers

		Frequency	Percent	Valid Percent	Cumulative Percent
Question 1	Yes	185	70.9	70.9	70.9
	No	76	29.1	29.1	100.0
Question 2	Yes	110	42.2	42.2	42.2
	No	151	57.8	57.8	100.0
Question 3	Yes	86	32.9	32.9	32.9
	No	175	67.1	67.1	100.0
Question 4	Yes	162	62.1	62.1	62.1
	No	99	37.9	37.9	100.0
Question 5	Yes	154	59.0	59.0	59.0
	No	107	41.0	41.0	100.0
Question 6	Yes	178	68.2	68.2	68.2
	No	83	31.8	31.8	100.0
Question 7	Yes	191	73.2	73.2	73.2
	No	70	26.8	26.8	100.0
Question 8	Yes	211	80.8	80.8	80.8
	No	50	19.2	19.2	100.0
Question 9	Yes	29	11.1	11.1	11.1
	No	232	88.9	88.9	100.0
Question 10	Yes	102	39.1	39.1	39.1
	No	159	60.9	60.9	100.0

Table 4. Chi-square test results of research questions

	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Question 8	Question 9	Question 10
Chi-Square	51.88 ^a	1.30	1.17	44.23 ^a	42.52 ^a	48.94 ^a	56.94 ^a	62.23 ^a	0.61	1.25
Asymp. Sig.	0.00	0.25	0.29	0.00	0.00	0.00	0.00	0.00	0.44	0.27

Table 5. T-test results of research questions

	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Question 8	Question 9	Question 10
t-test	8.820	1.054	1.012	3.223	3.064	4.871	9.370	10.036	0.452	0.915
significance	.000	.204	.241	.000	.002	.000	.000	.000	0.678	.347

4. Conclusion

This study investigated whether Jordanians concern about how healthy is their food. We used a questionnaire in order to achieve the objectives of the study. Based on the answers of 261 respondents, the results showed that

Jordanians significantly care about how healthy is their food in general. The results also showed that Jordanians concern about eating fruits and vegetables for healthier bodies. In addition, there was a statistically significant care about the amount of fat, added sugar and calories in their food. On the other hand, we found no statistically significant importance of the added preservatives and colorings in Jordanians choices of food. Finally, the results showed that Jordanians do not seem to statistically concern about whether their food is natural or manufactured and whether it is plant or animal sourced. Future research could investigate whether these results are different according to demographic factors.

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