Food habits of female students of the Faculty of Education for Home Economics at Umm Al-Qura University and its relation to some variables for the academic year 2017-2018

ABSTRACT

This study aimed to identify the degree of applying food habits among Umm Al-Qura University students and its relation to some variables (level of study, specialization, social status, cumulative average) for the academic year 2017/2018. The study sample consisted of (150) students who were chosen randomly from the students of Home Economics College in Makkah. The researchers used the descriptive analytical approach, which was based on the study of any phenomenon as it exists in fact, and describe it qualitatively or quantitatively. To achieve the objective of the study, a questionnaire was applied after verifying its validity and stability. It consisted of (30) paragraphs that included a set of healthy food habits and constructed according to the Likert scale quintet. The data were analyzed using the statistical packages (SPSS). The results showed that there were statistically significant differences at the level of (α ≥ 0.05) due to the level of study and for the fourth year students. Whereas, there were no significant differences in the level of function (α ≥ 0.05) between the application of food habits due to the variable of the social situation, specialization, and the cumulative rate. The researchers recommended in the light of the study results: the adoption of a national strategy at the level of public and private universities through the development of curricula related to food and nutrition and inclusion in the early stages of education years. More nutrition research is needed across all age groups in the first stages of schooling.

Key words: Food habits, Umm Al-Qura University students, cumulative average, level of study, social status, specialization, college of home economics.

INTRODUCTION

Proper nutrition and healthy food habits play a major role in maintaining and improving the health of individuals. The Almighty said: "Eat and drink and do not be distracted. He does not love the extravagant" (Al-A'raaf: 31), that is, moderation, balance and non-waste in food, are required.

The Gulf society has witnessed many changes in the social, economic and health aspects, which have led to a shift in food habits and lifestyle (Musiqar, 1997). As a result of the scientific progress and the explosion of knowledge today, which led to developments in all areas of life, and perhaps the most important of which is the health of our children who are the builders of the future of this young society, improve the health and nutrition, and raise the level of public health of the community to which they belong. Is mainly related to the level of awareness of these students in that society (Al-Razhi, 1999).

In Saudi Arabia, the changes in food habits and practices led to the up growth of some food and health problems among its members (Al-Harbi, 2004). This resulted in an increase in some nutritional and health problems, including the spread of obesity and associated diseases, especially among our students (Hussein, 2004).
The family, has a significant impact on taking care of the health and safety of their children, through follow-up of what they gain of concepts, principles and trends of positive food and stabilizing them. This will reduce the spread of food problems, and diseases due to malnutrition that spread among them (Muskair, 2004). However, the unhealthy food habits are a threat to the regular classical food habits (breakfast, lunch, dinner) and the shift to random eating habits - eating anywhere and anytime - especially in youth that are equivalent to the university level and beyond (Belaidi, 2008).

Thus, the university stage is the stage of rapid start and freedom for students to acquire good or bad food habits, because they are out of the house for irregular and long periods, where they have many different options of unhealthy foods, and tend to eat fast food rich in fats and carbohydrates, as well as juices that contain high sugars and some unnatural preservatives, without taking into account the necessary nutrients for the body. Therefore, the present study was conducted to show the extent of application of these healthy and healthy food habits of these students at this important university stage for the academic year 2017/2018.

Study questions

Because of the importance of nutrition education, the study aims to achieve a significant change in food habits and habits; to improve the nutritional status and health of the individual and society. This study investigates the extent to which the food habits of female students at the College of Education for Home Economics at Umm Al-Qura University in Makkah in Saudi Arabia for the year 2018 have been applied and their relation to some variables by answering the following questions:

Q1: What is the degree of application of dietary habits of female students of the College of Education for home economics at Umm Al-Qura University in Mecca in 2018?

Q2: Are there significant statistical differences at the level of (α ≥ 0.05) for the extent of application of food habits in the sample members, due to the variable level of study?

Q3: Are there significant differences at the level of (α ≥ 0.05) for the extent of application of the food habits of the sample members due to the achievement variable (cumulative average)?

Q4: Are there statistically significant differences at the level of (α ≥ 0.05) for the extent of application of food habits of the sample members due to the variable specialization?

Q5: Are there significant differences at the level of (α ≥ 0.05) for the extent of application of the food habits of the sample members due to the variable level of social mobility?

The hypotheses of the study

1. There is no implementation of the food habits among the students of Umm Al-Qura University in Mecca for the academic year 2017-2018?

2. There are no statistically significant differences at the level of (α ≥ 0.05) for the extent of application of food habits in the sample population, due to the variables of the study: Specialization, social status, and achievement level (GPA)?

3. There are no statistically significant differences at the level of (α ≥ 0.05) for the extent of application of food habits in the sample population, due to the achievement variable (cumulative average).

4. There are no statistically significant differences at the level of (α ≥ 0.05) for the extent of application of food habits in the sample population, due to the specialization variable.

5. There are no statistically significant differences at the level of (α ≥ 0.05) for the extent of application of food habits in the sample population, due to the variable social situation.

Study limitations

Location Limit: Umm Al Qura University, Makkah, Kingdom of Saudi Arabia.

Time Limit: This study was applied in the second semester of the year 1439 in the spring of the second month of April of the academic year 2017/2018.

Qualitative Limit: This study was limited to a representative sample (10%) of the students of the Faculty of Education Home Economics at Umm Al-Qura University, randomly selected from the first year to the fourth year of 2018.

LITERATURE REVIEW

Due to the importance of food habits for the health of the individual and society, many studies have been conducted on this subject in many countries with different cultures. Yahia et al. (2008) evaluated the prevalence of overweight and obesity and examine the dietary habits of a sample of students from the Lebanese American University (Beirut), that is, 220 students (43.6% males and 56.4% females), between age range of 20 and 1.9 years. The study obtained several results: weight gain and obesity were more common among male students compared with females (37.5% and 12.5% vs 13.6 and 3.2%, respectively). As regards food habits, it was shown that the majority of the students (61.4%) reported eating meals regularly, and the female students showed healthy eating habits as
compared with male students in terms of daily breakfast, with no statistically significant differences between the sexes.

Bukhari (2010) identify the nutritional status of gifted students (males and females) in the area of Mecca. The questionnaire was used on a sample of (278) gifted and gifted students enrolled in talent centers in Makkah, Jeddah and Taif. The results showed that more than half of the sample (72.50%) belonged to families with a high economic and social level with a high level of parental education. The sample practice some good eating habits such as having breakfast (68.3%) and eating three meals at home (70%). On the other hand, the statistical analysis of the food for the past 24 hours showed that the sample does not address the daily needs of vitamins and minerals. The study confirmed that more than 33% of the gifted and 50% of the gifted were obese and also had some poor eating habits.

Cefai and Camilleri (2011) aimed at discovering the food habits of Maltese University students and identify their health practices by sex, faculty members and academic year. To achieve the goal, a self-administered questionnaire was prepared via the Internet and sent to a sample of 494 students. The study found several results: half of the students ate 1-2 portions of fruit and vegetables per day. More than half of the sample chose to eat unhealthy food. Less than half of the sample ate a regular healthy breakfast, while a third of the sample consumes soft drinks regularly, and students were more aware of their diet.

Melhem and Al-Wadiyan (2013) conducted a study aimed at identifying the daily food habits and behaviors of the students of the Faculty of Physical Education at Yarmouk University in Jordan and determining the differences in food habits and behaviors according to the gender variables, the school level and the cumulative average. The study was conducted using samples of (79) male and female students from the Faculty of Physical Education at Yarmouk University. A questionnaire was used consisting of (19) statements. The results showed a high degree of adherence to the habits and behaviors of healthy food, while there were no significant differences in the food habits and behaviors among the sample according to the variables of gender, academic level, and the cumulative rate.

While Algan (2015) aimed to assess the food habits of students of Konya University, Turkey. The study was conducted on university students aged between 17 and 35 years. Data were collected in a sample questionnaire of 310 students selected randomly (59.7% males and 40.3% females). It was found that most students ignore meals (30.0%). Only 16.8% of them ate three meals per day. Breakfast was the most neglected (60.6%) meals, and they ate dinner regularly at home. Lunch was usually taken outside the house. There were statistically significant differences for daily energy (calorie consumption) and nutrients taken in favor of males.

El Ansari et al. (2015) aimed at identifying the food habits of undergraduate students in Finland and their commitment to healthy diet during the 2013-2014 school year. The sample comprised 1,189 university students. The results showed high levels of food commitment for most unhealthy foods, moderate adherence to most health food (over 50%), less than 50% for adherence to principles, guidelines and dietary and health advice. Most respondents considered eating healthy as important (78.8%).

Abd El-Mouty (2016) conducted a cross-sectional study between (607) students and (17) dining hall inside Mansoura University from March to June 2014. The aim of the study was to investigate the factors affecting the food habits of Mansoura University students in Egypt. The results showed that the level of food habits was not satisfactory among the sample and 99% with regard to: type of meal, eating habits, food selection habits, and food safety. More than three-quarters of the sample (83%) had a weak knowledge of the healthy diet, and the study proved that students practiced many unhealthy eating habits on campus, and there are many factors attributed to eating habits that can be either individual or factors which enable students to easily access unhealthy foods.

Hoque et al. (2016) aimed at building healthy food habits in childhood and studying attitudes, knowledge and eating habits of schoolchildren in Malaysia. To achieve this goal, a survey was conducted on the food habits of the sample of 400 primary school students in standards 4 to 6 in the state of Selangor, Malaysia. The results showed that students understood the mistake of not eating healthy food and foods that are considered healthy. There was also a large consumption of fried foods and contained sugar, salt and saturated fat. When choosing food, two main factors contributed to student decisions: cleanliness (65.8%) and preference of parents (12.3%). It was recommended that, through the application of the Integrated School Health Program (ISHP) correctly, food habits can be improved for students by establishing a school with a healthy environment.

Abraham et al. (2018) outlined the food habits of students in the College of Bethel, Indiana, USA and their nutritional needs. A descriptive approach was used to achieve the goal of the study. It was shown that the students were aware that they ate unhealthy meals containing Additives, because of their good taste, although the majority recognized the intake of fresh fruit, and a large number of processed foods such as potato chips, cakes and cereals on the basis of ease of preparation. Drinking soft drinks were less used habits, and the study also proved that the students have good knowledge of health food requirements.

METHODOLOGY

Data collection and participants

The nature of the present study and its predetermined
objectives imposed the use of the analytical descriptive approach, which is based on the study of reality or phenomenon as it exists in reality and is concerned as a precise description and expressed in qualitative or quantitative terms (Ades, 1999). The study society is the Faculty of Education for Home Economics, specialized in designing costumes, housing and housekeeping for the second semester of the academic year 2017/2018. Where a total of 1432 student, total sample size of 150 students, and 10% of the study area were taken (Obeidat et al., 2004).

The instrument

A questionnaire was constructed to show the food habits of the sample and its relation to some variables for the academic year 2017/2018. Each statement of the questionnaire was given a weight which was graded according to the Likert scale (always, often, sometimes, rarely, never) and represented digital responses (1.2.3.4.5). The standard judgment was calculated using the equation on the relative weight to determine the extent of agreement about the areas of the questionnaire and its statements. Thus, we clarify the answers to the questionnaire, its grades and the criterion of judgment:

- Response (1) represents (never) and the judgment criterion (mean) is 1.1.8 and the answer is null
- Response (2) represents (rarely) is the criterion (mean) of 1.81-2.6 and the answer is weak
- Response (3) represents (sometimes) and the judgment criterion (mean) is 2.61-3.40 and the answer is average
- Response (4) represents (often) and the judgment criterion (mean) is 3.41-4.2 and the answer is high
- Response (5) represents OK (always) and the judgment standard (mean) is 4.21-5 and the answer is very high

The study instrument (questionnaire) was presented to a jury with experience and the specialization from the faculty members in Saudi and Jordanian universities to investigate its validity. After adjustments were made in accordance with the suggestions and views of the jury members, which had had a positive impact on the finalization of the items of the instrument, It was agreed on (30) statements instead of (38) statements.

Table 6 shows the mean of the instrument as a whole is (3.50). This average is higher than the average measuring instrument for this study and is between the degree of neutrality (+ 3) and the degree of approval (+ 4). This indicates that the application of food habits among the sample for the academic year 2017/2018, has a high degree, and thus reject the hypothesis of nihilism.

The study hypotheses

The first hypothesis states that "there is no application of food habits among the students of the Faculty of Education for Home Economics at Umm Al-Qura University for the academic year 2017/2018". To validate the hypothesis, the average calculation and standard deviation of the instrument as a whole were calculated as shown in Table 6. Statistical procedures

After collecting and reviewing the questionnaires, the Statistical Package for Social Sciences (SPSS) was used to analyze data statistically as follows:

1. Descriptive statistics: frequency, mean and standard deviation to describe the study variables.
2. Analysis of differences such as ANOVA and T-TEST. This analysis was used to determine if there were significant differences between the averages of more than two groups and their relationship to the dependent variable.

The first hypothesis states that "there is no application of food habits among the students of the Faculty of Education for Home Economics at Umm Al-Qura University for the academic year 2017/2018". To validate the hypothesis, the average calculation and standard deviation of the instrument as a whole were calculated as shown in Table 6. Table 6 shows the mean of the instrument as a whole is (3.50). This average is higher than the average measuring instrument for this study and is between the degree of neutrality (+ 3) and the degree of approval (+ 4). This indicates that the application of food habits among the sample for the academic year 2017/2018, has a high degree, and thus reject the hypothesis of nihilism.

The second hypothesis states "There are no statistically significant differences at the level of a (0.05) for the extent
Table 1: The stability of the instrument as a whole.

| The Instrument | Sequence of statements | The stability value of the instrument as a whole |
|----------------|------------------------|-------------------------------------------------|
| Food habits    | (1-30)                 | 76.1%                                           |

Table 2: Distribution of study sample by academic level.

| SDU-Level     | Number | Percentage |
|---------------|--------|------------|
| 1st year      | 37     | 26.62      |
| 2nd year      | 35     | 25.18      |
| 3rd year      | 34     | 24.46      |
| 4th year      | 33     | 23.74      |
| Total         | 139    | 100%       |

Table 3: Distribution of study sample by degree of achievement.

| Degree of achievement | Number | Percentage |
|-----------------------|--------|------------|
| Med                   | 4      | 2.9        |
| Good                  | 23     | 16.5       |
| Very Good             | 69     | 49.6       |
| Excellent             | 43     | 31         |
| Total                 | 139    | 100%       |

Table 4: Distribution of study sample by specialization.

| Specialization        | Number | Percentage |
|-----------------------|--------|------------|
| Fashion design        | 40     | 28.78%     |
| House Management      | 99     | 71.22%     |

Table 5: Distribution of study sample by social status.

| Social status | Number | Percentage |
|---------------|--------|------------|
| Married       | 35     | 25.18%     |
| Single        | 104    | 74.82%     |

Table 6: The average calculation and standard deviation of the instrument.

| Paragraph | Mean    | Std. Deviation |
|-----------|---------|----------------|
| q1        | 3.3165  | 1.02176        |
| q2        | 3.4173  | 1.23886        |
| q3        | 4.2374  | .92143         |
| q4        | 3.2374  | 1.12335        |
| q5        | 3.4460  | 1.13043        |
| q6        | 3.1367  | 1.29212        |
| q7        | 2.9065  | 1.23882        |
| q8        | 3.6547  | 1.27241        |
| q9        | 3.8345  | 1.09410        |
| q10       | 3.4101  | 1.28994        |
| q11       | 3.6906  | 1.09577        |
| q12       | 2.8058  | 1.27903        |
Table 6: Continued.

| q13  | 2.6619 | 1.40162 |
|------|--------|---------|
| q14  | 3.9281 | 1.18346 |
| q15  | 3.7122 | 1.36331 |
| q16  | 4.7770 | .61436  |
| q17  | 3.6331 | 1.21072 |
| q18  | 3.6403 | 1.22774 |
| q19  | 3.5899 | 1.10213 |
| q20  | 4.2086 | .95154  |
| q21  | 3.6547 | 1.41274 |
| q22  | 3.7698 | 1.19368 |
| q23  | 3.8129 | 1.17688 |
| q24  | 4.0935 | 1.04875 |
| q25  | 3.7698 | 1.29836 |
| q26  | 3.1511 | 1.44921 |
| q27  | 3.0576 | 1.44849 |
| q28  | 2.7698 | 1.35837 |
| q29  | 2.6978 | 1.45789 |
| q30  | 3.4317 | 1.34083 |

Total Average 3.50

Table 7: Tests of between-subjects effect for the dependent variable food habits.

| Source      | Sum of squares | Di | Mean Square | F   | Sig  | Eta Squared |
|-------------|----------------|----|-------------|-----|------|-------------|
| SDU-Level   | 1.958          | 3  | 0.653       | 3065.6 | 0.014 | 0.075       |
| Error       | 24.098         | 135| 0.179       |      |      |             |
| Total       | 1743.538       | 139|             |      |      |             |
| Corrected Total | 26.056   | 138|             |      |      |             |

a.R Squared =0.075 (Adjusted R Squared = .055).

of application of food habits in the sample, due to the variable level of study.

Table 7 shows that there are statistically significant differences at the level of (α ≥ 0.05) between the application of food habits and the variable of the academic level, where the level of significance (0.014) is less than (α ≥ 0.05). The nihilistic hypothesis is rejected.

Table 8 shows the differences between school years and the extent to which food habits were applied. The Scheffe test was used to show these differences. It was found that there were differences between years of study for fourth year students.

The third hypothesis states "there are no statistically significant differences at the level of (α ≥ 0.05) for the extent of applying food habits of the sample, due to the achievement variable (cumulative rate)". Table 9 shows the results of the analysis of the test, the mono-valence, averages and standard deviation of the achievement variable.

Whereas Table 10 shows that there are no statistically significant differences at the (α ≥ 0.05) level between the application of food habits and the achievement variable (GPA), where the level of significance (0.792) is greater than (α ≥ 0.05) depending on the achievement variable. The null hypothesis is accepted.

The fourth hypothesis states that "there are no statistically significant differences (α ≥ 0.05) for the extent to which food habits are applied in the sample. Table 11 shows the mean and standard deviation of the specialization variable.

Table 12 shows the results of the test analysis (T-Test) and the absence of statistically significant differences at the level of significance (α ≥ 0.05) between the application of food habits and the variable of specialization. The level of indication of significance (0.441) was more than (α ≥ 0.05) according to the specialization variable. Therefore, the null hypothesis is accepted.

The fifth hypothesis states that "there are no statistically significant differences (α ≥ 0.05) for the extent of application of food habits in the sample". Table 13 shows the mean and standard deviation of the social status variable.
Table 8: Multiple comparisons dependent variable: Eating habits.

| (I)SDU-Level | (J)SDU-Level | Mean differences (I-J) | Std. Error | Sig    | Interval                      |
|--------------|--------------|------------------------|------------|--------|-------------------------------|
| 1st-year     | 2nd-year     | 8.852E-02              | 9.962E-02  | 0.852  | -0.1935 - 0.3709              |
| 3rd          | 4th          | 0.3813                 | 0.1004     | 0.054  | -2.87E-03 - 0.5655            |
|              |              | -2.23E-02              | 0.1012     | -0.997 | -0.3087 - 0.2641              |

| 2nd-year     | 1st-year     | -8.852E-02             | 9.962E-02  | 0.852  | -0.3706 - 0.1935              |
| 3rd          | 4th          | 0.1928                 | 0.1017     | 0.314  | 9.962E-02 - 0.4808            |
|              |              | -0.1109                | 0.1025     | 0.038  | -0.4011 - 0.1794              |

| 3rd-year     | 1st-year     | -0.2813                | 0.1004     | 0.054  | -0.5655 - 2.869E-03           |
| 2nd          | 4th          | -0.1928                | 0.1017     | 0.314  | -0.4808 - 9.525E-02           |
|              |              | -0.3036                | 0.1032     | 0.038  | -0.5959 - 1.13E-02            |

| 4th-year     | 1st-year     | 2.233E-02              | 0.1012     | 0.997  | -0.2641 - 0.3087             |
| 2nd          | 3rd          | 0.1109                 | 0.1025     | 0.761  | -0.1794 - 0.4011             |
|              |              | 0.3036                 | 0.1032     | 0.038  | 1.133E-02 - 0.5950           |

Based on observed means.

*The mean differences is significant at (.05) level

Table 9: The mono-valence, averages and standard deviation of the achievement variable.

| ACH       | Mean   | Std. Error | 95% confidence Interval |
|-----------|--------|------------|-------------------------|
| Med       | 3.442  | 0.219      | 3.009 - 3.874           |
| Good      | 3.571  | 0.091      | 3.391 - 3.751           |
| Very Good | 3.483  | 0.053      | 3.379 - 3.587           |
| Excellent | 3.543  | 0.067      | 3.411 - 3.675           |

Dependent Variable: Food habits.

Table 10: Tests of between-subjects effects.

| Source    | Sum of Di | Mean Square | F     | Sig | Eta  |
|-----------|-----------|-------------|-------|-----|------|
| ACH       | 0.199     | 3           | 6.621E-02 | 0.346 | 0.792 | 0.008 |
| Error     | 25.857    | 135         | 0.192 |     |      |      |
| Total     | 1743.538  | 139         |       |     |      |      |
| Corrected | 26.056    | 138         |       |     |      |      |

R Squared=.008 (Adjusted R Squared=.014)

Table 11: The mean and standard deviation of the specialization variable.

| Specialization          | N  | Mean  | Std Deviation | Std. Error Mean |
|-------------------------|----|-------|---------------|-----------------|
| English habits design   | 40 | 3.5600| 0.4359        | 6.192E-02       |
| Manage                  | 99 | 3.4970| 4349          | 4.371E-2        |

Table 14 shows the results of the test analysis (T-Test) and the absence of statistically significant differences at the level of (α ≥ 0.05) between the application of food habits and the social status variable where the level of sig (0.74) was more than (α ≥ 0.05) according to the variable of the social situation. Thus the null hypothesis is accepted.
**Table 12:** Independent sample test.

|                          | Levene’s test for equality of variances | T-Test for equality of means |
|--------------------------|-----------------------------------------|------------------------------|
|                          | F | sig | T  | Df | Sig (2-tailed) | Mean differences | Std. error differences | 95% confidence interval of the differences |
| Equal variance assumed   | 0.158 | 0.698 | 0.773 | 137 | 0.441 | 6.303E-02 | 8.153E-02 | -9.82E-02 | 2242 |
| Equal variance not assumed | 0.772 | 72.043 | 0.442 | 6.303E-02 | 8.161E-02 | -9.97E-02 | 0.2257 |

**Table 13:** The mean and standard deviation of the social status variable.

| Social status | N | Mean   | Std. Deviation | Std. Error Mean |
|---------------|---|--------|----------------|-----------------|
| Married       | 35 | 3.6286 | 0.4088         | 6.910E-2        |
| single        | 104 | 3.4769 | 0.4381         | 4.296E-2        |

**Table 14:** T-Test results.

|                          | Levene’s Test for equality of variances | T-Test for equality of means |
|--------------------------|-----------------------------------------|------------------------------|
|                          | F | sig | T  | Df | Sig (2-tailed) | Mean differences | Std. error differences | 95% confidence interval of the differences |
| Equal variance assumed   | 0.983 | 0.323 | 1.800 | 137 | 0.074 | 0.1516 | 8.423E-02 | -1.49E-02 | 0.3182 |
| Equal variance not assumed | 1.864 | 62.291 | 0.067 | 0.1516 | 8.137E-02 | -1.137E-02 | 0.3143 |

**RESULTS**

To answer the first question, "What is the degree of application of food habits of female students of the College of Education for home economics at Umm Al-Qura University in Mecca in 2018?", the means and the standard deviations were calculated for all the statements of the questionnaire and for the questionnaire as a whole. Table 6 shows that the highest mean of the students' responses to the statements of the study instrument was (4.77). For instance, the statement (16), which states that "ensure that the food is clean before eating" scored a very high rating and falls under the box "always". Followed by statement (3), which states: "I eat the daily meal (lunch)" with an average of 4.23 which was considered a very high score and fall under the box "always". Statement 20, which states "Be sure to chew food well before swallowing" scored an average of 4.20 with a high rating that falls under the box "often". While the minimum mean of (2.66) was for statement (13), which states that "I take supplements to maintain my health and body safety without consulting the specialists," and with a moderate score tend to decrease and are listed under the box "sometimes". Followed by statement (29) and (28). "Ensure to now the calorie content of the food I eat" and "I am affected by commercials when buying food" with average (2.69) and (2.76) were considered a moderate average and falls under the box "sometimes". On the other hand, the mean of the instrument as a whole scored (3.50) and with a high rating which falls under the box "often". This indicates that the students of the College of Education for Home Economics at Umm Al-Qura University have good eating habits.

To answer the second question, "Are there differences in statistical significance for the food habits of the sample due to the level of the study (the school year?)", ANOVA and Scheffe were used and the results showed that there were statistically significant differences for the fourth year (levels 7 and 8).

To answer the third question, "Are there any statistically significant differences in the food habits among the sample due to the cumulative rate (achievement)?", Table 10 shows that there were no statistically significant differences in the food habits of the sample due to the achievement variable (Cumulative rate).

To answer the fourth question, "Are there any statistically significant differences in the food habits among the respondents due to specialization (fashion design, housing and housekeeping)?", Table 12 shows that there were no statistically significant differences in the food habits of the sample attributable to specialization variable.

To answer the fifth question, "Are there differences of statistical significance for the food habits of the sample due to the variable of the social situation (married,
unmarried)?". Table 14 shows that there were no statistically significant differences in the food habits of the sample attributable to the social status variable.

**DISCUSSION**

The results of the first question indicated that study sample practiced good food habits with a mean of 3.50 and a high degree of evaluation. This may be due to the nature of some of the subjects studied in college which are related to food education. This is also because most of the students were in the lagoon of late adolescence, dominated by the search for girl with beauty and agility. This finding is in line with the study of Yahia et al. (2008), who proved that the majority of students eat regular meals, and that female students practice healthier eating habits than male students, and also with Bukhari (2010), who indicated that the sample exercise of good eating habits. Moreover, Melhem et al. (2013) reported students’ degree of commitment to health food habits and behaviors to be high. The highest mean of this study was (4.77) for statement 16 "Ensure the cleanliness of food before eating it", and this result is in agreement with those of Hoque et al. (2016), who indicated that the most important factor for students to make a decision on food (65.8%) was cleanliness. This finding differs from those of Cefai et al. (2011), Al Ansari et al. (2015), Abd Elmouty (2016) and Abraham et al. (2018), all of which indicated that there were unhealthy food habits and behaviors in different samples and countries where these studies were applied.

The results of the second question indicated that there were statistically significant differences in the food habits of the sample members due to the level of the students study and for the fourth year students (level 7 and 8). This result is due to the fact that the fourth year students studied most courses, including food and health, and also because they were more mature. Most of them were married and mothers, and do not lose sight of the importance of their search for beauty and elegance and were about to graduate and engage in work outside the walls of the university. This result was different from those of Melhem et al. (2013), who indicated that there were no differences in food habits which was attributed to the variable level of study.

The results of the third question showed that there were no statistically significant differences in food habits due to the cumulative average. This result is in agreement with that of Melhem et al. (2013), who indicated that there were no statistically significant differences in the food habits of students according to the cumulative average variable.

The results related to the fourth and fifth questions indicate that there were no statistically significant differences due to the variables of specialization and social status. The reason for the specialization is that students study general and cultural subjects, including subjects on nutrition and in the same hall and time for the two sections. As for the social situation, the students were of the same age groups and thus showed same concerns and aspirations, and increase the chances of impact on peers on them. This is also because they live in the same environment and society.

**Summary of results**

1). There was an application of food habits of female students of the Faculty of Education for Home Economics at Umm Al-Qura University, and to a high degree for the academic year 2017/2018.

2). There were statistically significant differences at the level of (α ≥ 0.05) for the extent of application of food habits among female students of the Faculty of Education for Home Economics at Umm Al-Qura University, due to the variable level of study and for the fourth year students.

3). There were no statistically significant differences at the level of (α ≥ 0.05) for the extent of the food habits of Umm Al Qura University students due to the achievement variable (cumulative average).

4). There were no statistically significant differences at the level of (α ≥ 0.05) for the extent of application of food habits among female students of the Faculty of Education for Home Economics at Umm Al Qura University, due to the variable specialization.

5). There were no statistically significant differences at the level of (α ≥ 0.05) for the extent of application of food habits among female students of the Faculty of Education for Home Economics at Umm Al Qura University, due to the variable social status.

**RECOMMENDATIONS**

1). Adopting a national strategy at the level of public and private universities through the development of curricula related to food and nutrition and their inclusion in the early stages of education years.

2). Attention and continuity in the dissemination of food culture among females, especially in university education, in order to improve their knowledge and awareness in the planning and implementation of healthy meals, and modify some misconduct, which is reflected on the nutrition of all members of the family.

3). To raise awareness of the importance of food and the basics of nutrition in schools and universities in which all concerned parties (eg, Ministry of Health, Ministry of Education, Ministry of Higher Education, Ministry of Agriculture and Community Organizations) are involved.

4). Conduct further field research to detect the nutritional and nutritional status of primary school students.

**REFERENCES**

Abd El-Mouty SM (2016). Exploring Factors Affecting Dietary Habits Of Mansoura University Students. J. Nurs. Health Sci. 5(3): 90-100.
Adas A (1999). Principles of educational research (3rd ed.). Al-Forman House of Publishing, Amman, p. 101.

Al-Harbi MM (2004). Food and living factors associated with chronic diseases in Saudi Arabia. Arab J. Food Nutr. 10(2): 46-38.

Al-Razzahi A-WA (1999). Health awareness among students of basic education in the Republic of Yemen. Arab J. Educ. 19(2): 110-115.

Baleid M (2008). The Effect of Fast Food on the Eating Habits of Youth in the City of Qustina, Unpublished Master Thesis, Faculty of Humanities and Social Sciences, Montoury University, Constantine.

Bukhari R (2010). Evaluation of the nutritional status of gifted students at the primary level in Makkah Al Mukarramah Region. Master Thesis unpublished. Faculty of Education. Umm Al Qura University.

Burgess A, Dean RFA (1962). Malnutrition, and Food Habits, Tavistock Publication, NY. pp. 19-28.

Cefai C, Camilleri L (2011). The dietary habits of Maltese university students. Malta Med. J. 23(2): 6-12.

Hoque K, Kamaluddin M, Zabidi A, Abdul R, Athari, Abdul W (2016). Building healthy eating habits in childhood: a study of the attitudes, knowledge and dietary habits of schoolchildren in Malaysia, Faculty of Education, University of Malaya, Kuala Lumpur, Malaysia.

Hussein KH (2001). Obesity in the Arab World: Causes, Complications and Treatment. Arab J. Sci. Nutr. Healthy Cult. 28.7(1): 1.

Malhotra NK (2004). Marketing research Prentice Hall, fourth edition, New Jersey, p. 268.

Maysaqer A (2004). Food Habits and Nutritional Status of the Family in the United Arab Emirates. Arab J. Food Nutr. 5(10): 60-67.

Maysaqer A(1997). Nutrition in the Community and Assessment and Control of Nutrition Problems in Arab Societies, Dar Al Qalam For Publishing & Distribution, Dubai.

Melhem MB, Al-Wedian HM (2013). Daily dietary habits and behaviors among students of the Faculty of Physical Education at Yarmouk University. Mu’tah Magazine for Research and Studies - Humanities and Social Sciences – Jordan. 28(6):179-200.

Obeidat T (2004). Scientific Research Concept, Tools and Methods, 8th ed., Dar Al Fikr for Printing and Publishing, Amman, Jordan.

Ozkok G A(2015). Evaluation of Dietary Habits Among University Students in Konya, Turkey, International J. Nutr. Food Sci. 4(4): 431-438.

Sam A, Brooke RN, Ju Y, Shin B (2018). College students eating habits and knowledge of nutritional requirements. J. Hum. Health Nutr. 2(1).

The Holy Quran.

Walid EA, Sakari S, Anastasia S.(2015). Eating Habits and Dietary Intake: is Adherence to Dietary Guidelines Associated with Importance of Healthy Eating among Undergraduate University Students in Finland, Public Health Cent Eur. 23(4): 306-313.

Yahia N, Abdallah S, Abbass A (2008). Eating Habits and Obesity among Lebanese University Students, J. Nutr. 7(32):32.

Cite this article as:
Sa’ad BH, Al-Emami, Mohammed BG, Alsharif (2018). Food habits of female students of the Faculty of Education for Home Economics at Umm Al-Qura University and its relation to some variables for the academic year 2017-2018. Acad. J. Edu. Res. 7(4): 151-160.

Submit your manuscript at http://www.academiapublishing.org/journals/ajer