

Studying nutritional requirements to boarder students at practical and theoretical collage at sadaat branch*(comparative study)***Mohammed Said Mohammed EL-karsh***Supervisors By*

Prof. Dr

Sahar Osman El-shafai*Professor of nutrition and food science**Faculty of home economics**Minufiya university*

Prof. Dr

Ayman EL-Sayed EL-adwai*Professor of nutrition and food science**Faculty of home economics**Minufiya university***Abstract**

The study included 150 boarder student from physical education faculty as practical collage (35 male-40female) And faculty of law as theoretical collage(35 male-40 female) Aged 18-22 years randomly selected from two university town in El-sadat university ,menoufia governorate .

The assessment included socio- economic status ,anthropometric measurement, dietary data, food habit between boarder student and their opinion about town meals according to (amount, temperature, maturity, taste, design and meal time). The result revealed that about 50-52 % of male and female in physical education faculty had food budget 50-65% of income and about 40-45% of male and female in faculty of law had same budget.

The higher values of means of weight, height, BMI and skin fold were observed for male in faculty of law comparing with male in faculty of physical education and there is no significant between two groups in height, arm circumference and triceps circumference. The higher values of means of weight and BMI were observed for female in faculty of law comparing with female in faculty of physical education there is no significant between two groups in skin fold, arm circumference and triceps circumference. Majority of sample of male in faculty of physical education were eating breakfast and prefer vegetables, dairy product, starch and female of faculty of physical education prefer vegetables, starch and meat.

The result show that there is no significant difference of calories, total protein, fat, calcium and total iron and zinc, vit A,B1, B2, Niacin, B6 and folate between broader students(male and female) in faculty of law and faculty of physical education but there is significant difference of vit B12 between broader students(male and female) in faculty of law and faculty of physical education.

دراسة الاحتياجات الغذائية لطلبة الكليات العملية والنظرية بالمدينة الجامعية فرع السادات

أجريت هذه الدراسة علي ١٥٠ طالب وطالبة من طلاب المدن الجامعية من كليتان كلية تربية رياضية ككلية عملية (٣٥ طالب و ٤٠ طالبة) وكلية حقوق ككلية نظرية (٣٥ طالب و ٤٠ طالبة) تتراوح أعمارهم من ١٨-٢٢ سنة واختيرت العينة عشوائيا من مدنتان جامعتان في مدينة السادات بمحافظة المنوفية. تم جمع البيانات عن الحالة الاجتماعية والاقتصادية، المقاييس الجسمية والعادات الغذائية، استرجاع غذاء ٢٤ ساعة ورأيهم في وجبة المدينة من حيث (الكمية، درجة الحرارة، النضج، تصميم الوجبة، وميعاد تقديمها) وقد أسفرت النتائج عن ما يلي:

- متوسطات قيم الوزن، الطول، مؤشر كتلة الجسم وسمك طبقة الجلد اعلي في طلبة كلية الحقوق عن كلية تربية رياضية .
- متوسطات قيم الوزن ومؤشر كتلة الجسم اعلى في طالبات كلية حقوق عن طالبات كلية تربية رياضية.
- أغلبية طلبة كلية تربية رياضية يهتمون بتناول الإفطار ويفضلون تناول الخضروات ومنتجات الألبان والنشويات بالمقارنة بطلبة كلية حقوق.
- أغلبية طالبات كلية تربية رياضية يهتمون بتناول اللحوم والخضروات والنشويات بالمقارنة بطالبات كلية الحقوق.
- لم يظهر اي فروق بين طلبة وطالبات كلية تربية رياضية وكلية الحقوق في مقدار السرعات الحرارية ، البروتين، الكالسيوم، الحديد، فيتامينات (أ ، ب٦) وحمض الفوليك.
- متوسط تناول فتامين ب١٢ لطلبة وطالبات كلية حقوق اعلي من طلبة وطالبات كلية تربية رياضية.

Introduction

A balanced diet and consumption of food prepared in accordance with good practices are factors that contribute to maintaining a healthy lifestyle. The Mediterranean diet is widely recognized as satisfying the requirements of healthy nutrition (*Bonaccio et al., 2012*).

The different stages of life, in particular work or study-related, can produce profound changes in eating habits. The start of University education is an important time in the life of an individual, since it often represents a period of greater responsibility for food choices and health (*Colić Barić et al., 2003*).

The departure from the ideal model of the Mediterranean diet appeared more pronounced among students who left their family home to relocate to the University town. Although some positive changes were recorded (i.e. higher consumption of raw vegetables), the diet of these students was characterized by a lower intake of fish, pulses and cooked vegetables than students living with their families. Students living away from their families also showed a trend towards lower consumption of home-cooked meals and more frequent use of quick- and easy-to-prepare meals such as ready meals, raw/cold meals and frozen meals. This finding supports the thesis that assumption of primary responsibility for food shopping and preparation can lead to unhealthy dietary habits among university students living away from home (*Papadaki et al., 2007*).

(*Brache et al. 2003*) stated that reasons for malnutrition of adolescent girls such as misinformation about food values, eating in fast food restaurants, skipping meals, consuming snacks ,and foods high in sugar and going on fad dieting.

When an adolescent is also an athlete, there are many important factors to consider in terms of nutrition for both growth and sports performance. Participation in physical activity increases the energy and nutrient needs of an athlete (*Croll et al, 2006*).

The nutrients in which young athletes are most often deficient are carbohydrates, calcium, vitamin B, folate and iron (*Kern 2006; Thompson 1998*).

More and more young athletes are seeking personal fitness trainers for specialized workouts. As part of their training, we strive to help these young people become stronger and better able to withstand the rigors of sports competition.

But physical training is only one part of the equation: young athletes also need to learn why proper nutrition is vital to optimizing their sports

performance. Nutrient needs are higher during adolescence than at any other time in the life cycle (*CroU et al., 2006*).

Anthropometry is a key component of nutrition status assessment in children and adults (Simko). The NHANES anthropometry data have been used to track growth and weight trends in the U.S. population for more than thirty years (*Flegal, 2002*).

Subjects and methods

Subject:

This study was designed to access the nutritional status of practical and theoretical boarder student at Sadat university town at Sadat city.

Target population:

Male& Female boarder student age (18-22) years in practical and theoretical college (Physical Education faculty, faculty of law) at Sadat city, Sadat university town.

Sampling technique:

sample size: random sample of (150) boarder student (70)male , 80(female) from practical and theoretical college in Sadat university town, Sadat city , menoufia governorate.

- A. **place of study** : Sadat university town, boarder student, practical student (faculty of physical education) and theoretical student (faculty of law)
- B. **period of study:** The study was carried in the period from 1 October 2013 to the end of march 2014
- C. **sample classification:** The sample classified into four groups to theoretical boarder male (35) practical boarder male (35) theoretical boarder female (40) theoretical boarder female(40)

Gender	male	female	Total
Practical student	35	40	75
Theoretical student	35	40	75
Total	70	80	150

Methods:

A questionnaire form was designed and include the following.

- 1) **Socio – economic data** : including age, sex, name of College, mother education level, mother occupation, father education level, father occupation, family income, Number of family members, nutrition budget.
- 2) **Anthropometric management** :

A. Body weight:

Weight was measured with the subject tanding and wearing light clothes to the nearest 0.1kg using an electronic scale(*Khan et al., 2004*).

(b) Body height:

Height was measured while the subject was standing without foot wear, to the nearest 0.1 cm, using a portable Stadiometer (*Khan et al., 2004*).

B. (c) Mid –Upper arm circumference(AC) :

The MUAC tape is a simple and reliable method of assessing MUAC and can, with training, be used by all level of health workers. (*Myatt Mark et al., 2006*)

MUAC is the circumference of the left upper arm and is measured at the mid-point between the tips of the shoulder and elbow. To measure:

1. Bend the left arm, find and mark with a pen the olecranon process and acromium.
2. Mark the mid-point between these two marks.
3. With the arm hanging straight down, wrap a MUAC tape around the arm at the midpoint mark.
4. Measure to the nearest 1 mm.

It is easy to measure MUAC even on very thin arms (*United Nations System Standing Committee On Nutrition, 2008*)

C. Triceps Skin- Fold thickness(TSF):

Measure the triceps skin fold on the posterior surface of the right upper arm, at the point previously marked for the mid-upper arm circumference. Have the SP stand upright with weight evenly distributed and feet together, shoulders relaxed, and the arms hanging freely at the sides. Stand behind the SP's right side and gently grasp a fold of skin and subcutaneous adipose tissue with thumb and index finger, approximately 2.0 cm above the marked point. The skin fold should be parallel to the long axis of the arm .Place the tips of the caliper jaws over the marked point, perpendicular to the length of the fold Measure the skin fold thickness to the nearest 0.1 mm while the fingers continue to hold the skin fold. Call the measurement to the recorder before releasing the fold and the caliper.

(NHANES,2004 "National Health and Nutrition Examination Survey")

D. Mid Upper Arm Muscle Circumference (AMC):

Was computed according to the following formula

Arm muscle circumference (mm) = arm circumference –triceps- skin fold(mm)

$$Amc (cm)=ac(cm)-(0.314\times TSF(MM)).$$

E. Body Mass Index:

Body mass index (BMI) was calculated as the ratio of body mass in kg and the square of height in metre. Division of BMI into four categories was done according to the Centers for Disease Control and Prevention (CDC) guidelines: underweight <18.5, normal weight 18.5 to 24.9, overweight 25

to 29.9, and obese >30 The first index of adolescence was shown in height. From the age of 14, the males were taller and weighed more than the females. This observation is in keeping with the findings of (*De Koning, et al.,2007*)

Dietary Data: It is designed from 20 questions to know the food habits and access the nutritional knowledge of the boarder students.

Food consumption and nutrient intake: Nutrient intake carried out by using 24 hours recall for 2 different days. each student was asked to show all food consumed during the previous 24 hours. The nutritive was calculated of the daily intake was calculated using computer diet analysis for egyptian foods (**EL dashlooty&Mohamed,1996**)food analysis computer program.

(5) Statistical analysis for result: The collected data were subjected to statistical analysis to find out standard deviations ,significant differences ,correlation coefficients between variables, using the computer program SPSS/ P.C for IBM computer (*SPSS INC Chicago ,IL .V.S.A "Statistic Package of Social Science,1996"*)

Results

Table(1): Mean \pm SE and T. value of age , income , family size , district for practical and theoretical male boarder student.

Variables	Physics	Law	T. value	Sig.
	Mean \pm S.E \pm	Mean \pm S.E \pm		
Age(year)	19.314 \pm 1.105	19.657 \pm 1.282	-1.198	.457
Income	2.942 \pm .905	2.571 \pm .850	1.769	.532
Family size	4.685 \pm 1.761	5.200 \pm 1.132	-1.453	.091
resident	1.171 \pm .382	1.285 \pm .458	-1.133	.024

As regarding age the mean for male group in faculty of law and male in faculty of physical education was non significantly ($p>0.05$) being 19.657 \pm 1.282and 19.314 \pm 1.105 year respectively.

As regarding income the mean for male group in faculty of law and male in faculty of physical education was non significantly ($p>0.05$) being 2.571 \pm .850 and 2.942 \pm .905 pound respectively.

As regarding family size the mean for male group in faculty of law and male in faculty of physical education was non significantly ($p>0.05$) being 5.200 \pm 1.132 and 4.685 \pm 1.761 member respectively.

As regarding the resident, the mean for male group in faculty of law who living in urban area was significantly ($p<0.05$) higher than male in faculty of physical education being 1.285 \pm .458 and 1.171 \pm .382

Table(2): Mean \pm SE and T. value of age , income , family size , district for practical and theoretical female boarder student.

Variables	Physics	Law	T.value	Sig.
	Mean \pm S.E \pm	Mean \pm S.E \pm		
Age(year)	19.900 \pm 1.194	20.220 \pm 1.049	1.293-	.478
Income	2.825 \pm .780	2.950 \pm .845	-.687-	.965
Family size	5.200 \pm 1.017	4.850 \pm .833	1.683	.246
resident	1.325 \pm .474	1.300 \pm .464	.238	.635

As regarding age the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$) being 20.220 \pm 1.049 and 19.900 \pm 1.194 year respectively.

As regarding income the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$) being 2.950 \pm .845 and 2.825 \pm .780 pound respectively.

As regarding family size the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$) being 4.850 \pm .833 and 5.200 \pm 1.017 member respectively.

As regarding resident the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$) being 1.300 \pm .464 and 1.325 \pm .474 respectively

Table 3 : anthropometric measurement for male

Variables in male	Physical male	Law male	T value	Sig.
	Mean \pm S.E \pm	Mean \pm S.E \pm		
Length (m)	1.742 \pm .057	1.760 \pm .0762	-1.093-	.087
Weight (kg)	71.428 \pm 7.597	77.800 \pm 11.618	-2.715-	.006**
BMI (kg/m ²)	23.458 \pm 1.869	25.016 \pm 2.624	-2.860-	.011**
TSF (cm)	.797 \pm .252	1.182 \pm .46997	-4.277-	.018**
AC (cm)	28.771 \pm 2.951	28.214 \pm 2.361	.872	.187
AMC (cm)	26.204 \pm 2.837	24.496 \pm 2.090	2.867	.053

As regarding the weight, the mean for male group in faculty of law was significantly ($p<0.05$) higher than male in faculty of physical education being 77.800 \pm 11.618 and 71.428 \pm 7.597 kg respectively. These result don't agree with(Sethi and Sidhu ,1990) and(Sidhu et al. ,1996) who reported more weight for sport boys as compared to control group from 11 to 19 years.

(Mokha et al. ,1988) also suggested that lesser weight is advantageous to runners as they have to carry their bodies while running.

Mean of BMI for male group in faculty of law was significantly ($p<0.05$) higher than male in faculty of physical education being 25.016 ± 2.624 and 23.458 ± 1.869 respectively

These finding agree with (**Croll, 2006**) who report that athletes have lower BMI than non athletes.

Mean of skin fold for male group in faculty of law was significantly ($p<0.05$) higher than male in faculty of physical education being $1.182\pm .46997$ and $.797\pm .252$ respectively. These result agree with (Bhardwaj et al. ,1990) who reported that sports persons possess small value of skin fold thickness as compared to controls. (Singh ,1992) also reported in the same direction while working on sports and control boys of 11 to 19 years of age.

The mean of length, arm circumference and triceps circumference for male group in faculty of law and male in faculty of physical education was non significantly ($p>0.05$)

Table 4 : anthropometric measurement for female

Variables	Physics female	Law female	T.value	Sig.
	Mean±S.E ±	Mean±S.E ±		
Length (m)	1.741±.674	1.721±.100	1.069	.016**
Weight (cm)	71.400±7,722	73.425±14.530	-.778-	.000***
BMI(kg/m2)	23.494±1.901	24.553±2.824	-1.967	.001**
TSF (cm)	.887±.413	1.270±.496	-3.743-	.094
AC (cm)	28.725±2.846	27.512±2.779	1.928	.993
AMC (cm)	25.879±3.024	23.523±2.605	3.733	.285

As regarding the weight, the mean for female group in faculty of law was significantly ($p<0.05$) higher than female in faculty of physical education being 73.425 ± 14.530 and 71.400 ± 7.722 kg respectively. These result don't agree with (Ismail & Zawiah, 1988) who reported that the athletes had higher body weight and BMI but their body fat was significantly lower when compared to non-athletes. Similar results were reported by(Leelarthae-pin et al. ,1983) and (Nowak et al. 1988).

(Mokha et al. 1988) also suggested that lesser weight is advantageous to runners as they have to carry their bodies while running.

Mean of BMI for female group in faculty of law was significantly ($p<0.05$) higher than female in faculty of physical education being 24.553 ± 2.824 and 23.494 ± 1.901 respectively These finding agree with (Croll ,2006) who report that athletes have lower BMI than nonathletic.

Mean of length for female group in faculty of physical education was significantly higher female in faculty of law $1.741\pm.674$ and $1.721\pm.100$ respectively.

The mean of skin fold, arm circumference and arm muscle circumference for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$).

Table 5 : macro and micro nutrition for male

Variable	Physical male	Law male	T value	Sig.
	Mean± S.E ±	Mean±S.E ±		
Calories	2754.171±473.711	2394.351±463.605	3.212	.862
Total .protein	95.660±19.279	80.501±16.350	3.548	.526
Total fat	78.851±20.486	67.208±15.872	2.658	.084
Carbohydrate	413.542±73.494	353.984±84.710	3.142	.574
Calcium	620.650±259.758	527.425±188.039	1.720	.695
Phosphorus	1619.451±335.141	1361.134±260.983	3.598	.322
total.iron	18.922±4.457	14.752±3.290	4.452	.184
Sodium	2576.852±795.352	2167.880±693.624	2.293	.787
Potassium	3330.418±598.088	2717.580±439.389	4.885	.060
Zinc	16.805±2.873	14.390±2.8305	3.543	.516
Magnesium	567.792±89.959	494.684±89.242	3.413	.614
vit.A	528.548±285.492	455.377±227.148	1.187	.580
Vit.C	142.543±64.458	99.077±33.045	3.550	.000***
vit.D	1.591±1.257	2.722±2.005	-828-	.001***
vitE	16.185±7.313	11.810±4.170	3.075	.500
vit.B1	1.696±.367	1.370±.327	3.950	.335
vit.B2	3.126±.936	2.565±.679	2.878	.415
Niacin	23.544±5.862	20.318±5.464	2.379	.865
vit.B6	1.971±.513	1.901±.382	.699	.126
vit.B12	2.614±1.441	3.127±1.798	-313-	.019*
Folate	432.466±117.734	329.257±94.810	4.040	.277
Cholesterol	388.957±213.929	313.493±131.850	1.777	.124

As regarding carbohydrate the mean for male group in faculty of law and male in faculty of physical education was non significantly($p>0.05$).it was 353.9843 ± 84.71054 and 413.5429 ± 73.49409 respectively.

These result agree with(kern, 2006) and(Thompson, 1998) who reported that nutrition in which young athletes are most often deficient is carbohydrates.

As regarding calories and total protein the mean for male group in faculty of law and male in faculty of physical education was non significantly ($p>0.05$) These result not agree with(Nevin-folino ,2003) who reported young athletes need to consume enough calories each day to keep protein balance. While it has been suggested that adult athletes may need more protein than adults who are not athletes.

As regarding fat the mean for male group in faculty of law and male in faculty of physical education was non significantly ($p>0.05$) it was 67.2086 ± 15.87231 and 78.8511 ± 20.48692 respectively . Although (Montfort-Steiger and Williams, 2007) reported that fat is essential fuel for young athletes who engage in light to moderate intensity exercise.

As regarding calcium and total iron the mean for male group in faculty of law and male in faculty of physical education was non significantly ($p>0.05$). These result agree with (kern, 2006) and (Thompson ,1998)who reported that nutrition in which young athletes are most often deficient is calcium and total protien.

As regarding zinc the mean for male group in faculty of law and male in faculty of physical education was non significantly ($p>0.05$) it was 14.3900 ± 2.83053 and 16.8057 ± 2.87338 respectively . More encouraging was our finding that iron and zinc intake appeared adequate in a majority of both swimmers and non-athletes, both male and female. Zinc and iron play important roles in promoting athletic performance (McDonald and Keen ,1988) .

As regarding vit B1, Vit B2, Niacin, vit B6 and folate the mean for male group in faculty of law and male in faculty of physical education was non significantly ($p>0.05$). These result not agree with (kern, 2006) ;(Thompson, 1998) who reported that nutrition in which young athletes are most often deficient is vit B and folate.

But regarding vit B12 the mean for male group in faculty of law and male in faculty of physical education was significant ($p<0.05$) it was 3.1257 ± 1.79850 and 2.6143 ± 1.44138 respectively and these agree with(Kern 2006);(Thompson, 1998). who reported that nutrition in which young athletes are most often deficient is vit B and folate.

As regarding vit C the mean for male group in faculty of physical education was significantly ($p<0.05$) higher than male in faculty of law being 142.5443 ± 64.45897 and 99.0771 ± 33.04508 respectively These result not agree with (Rankinen and associates 1998) who reported that difference in energy intake, thiamine, riboflavin, folate, vitamin C, calcium, and iron intakes were similar between group.

As regarding vit D the mean for male group in faculty of law was significantly ($p<0.05$) higher than male in faculty of physical education being 2.7229 ± 2.00501 and 1.5914 ± 1.25771 respectively These result agree with (Rankinen and associates 1998) who reported that difference in vitamins D and E, zinc, and magnesium were significantly lower in the ski jumpers compared with the controls

Table 6 : macro and micro nutrition for female

Variables	Physical female	Law female	T.value	Sig.
	Mean± S.E ±	Mean±S.E ±		
Calories	1998.775±306.029	2025.262±361.323	-.354-	.854
Total .proten	74.043±15.039	69.472±14.580	1.380	.544
Total fat	58.377±13.044	56.275±12.703	.730	.432
Carbohydrate	292.235±57.736	309.115±68.117	-1.196-	.722
Caicium	452.456 ±119.201	399.6463±152.761	1.724	.026
Phosphorus	1195.605±244.730	1149.040±230.971	.875	.741
total.iron	13.725 ±3.070	13.076 ± 3.338	.905	.449
Sodium	2085.466±571.906	1783.613±385.648	2.767	.147
Potassium	2455.457±405.150	2490.113±448.742	-.363-	.835
Zinc	11.655 ±2.088	11.467 ±2.720	.346	.387
Magnesium	412.593 ±78.838	410.908 ±91.607	.088	.399
vit.A	385.773±128.828	346.435±130.958	1.354	.592
Vit.C	94.193±31.558	98.406±37.236	-.546-	.171
vit.D	1.482±.397	1.717±.475	-.731-	.978
vitE	11.717±7.454	13.787±7.904	-1.207-	.187
vit.B1	1.298±.343	1.192±.269	1.539	.096
vit.B2	2.238±.679	2.102±.596	.953	.619
Niacin	17.930±3.845	16.501±4.055	1.617	.878
vit.B6	1.652±.4073	1.607±.456	.465	.986
vit.B12	2.595±1.579	3.037±1.992	-1.101-	.034
Folate	281.757±63.823	274.501±73.494	.471	.279
Cholesterol	244.232±100.0614	241.506±98.026	.123	.972

As regarding calories the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$) it was 2025.262±361.323 and 1998.775±306.029 respectively. These agree with (Beals,2002) who found that female athletes consumed fewer calories than they expended (energy intake $\frac{1}{4}$ 2248 _ 414 kcal/d, energy expenditure $\frac{1}{4}$ 2815 kcal/d).

As regarding carbohydrate the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$).it was 309.115±68.117and 309.115±68.117respectively.These result agree with(kern, 2006);(Thompson, 1998) who reported that nutrition in which adolescent athletes are most often deficient is carbohydrates.

As regarding fat the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$)it was 56.275±12.703 and 58.377±13.044 respectively.Although (Montfort-Steiger and Williams ,2007)reported that fat is essential fuel for young athletes who engage in light to moderate intensity exercise.

As regarding Calcium the mean for female group in faculty of physical education was significantly ($p<0.05$)higher than female in faculty of law being 452.456±119.201and 399.6463±152.761respectively.These result not

disagree with(Papadopoulou SK,2002) who reported that adolescent athletes did not consume recommended intakes for calcium when he made study on dietary intake conducted in female Greek athletes.

As regarding total iron the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$) it was 13.076 ± 3.338 and 13.725 ± 3.070 respectively .These agree with(Beals,2002)who found that female athletes calcium and iron intakes were less than 100% of the recommendations, And agree with (Hassapidou and Manstrantoni,2001) who compared the dietary intake of elite Greek female athletes in four different sports (volleyball, middle distance running, ballet dancing, and swimming) with a nonathletic control group who reported a lower than recommended intake of iron in the athletic and nonathletic groups.

As regarding phosphorus the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$) it was 1149.040 ± 230.971 and 1195.605 ± 244.730 respectively. These result disagree with (Beals,2002) who found that whereas intakes of phosphorus, thiamine, and riboflavin were greater in female athletes compared with controls.

As regarding zinc the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$) it was 11.467 ± 2.720 and 11.655 ± 2.088 respectively.

As regarding magnesium the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$) it was 410.908 ± 91.607 and 412.593 ± 78.838 respectively. These disagree with Beals,2002 who found that female athletes They also consumed less than the recommended intakes for folate, B-complex vitamins, vitamin C, iron, calcium, magnesium, and zinc these agree with(Papadopoulou SK,2002) who found that female adolescent athletes did not consume recommended intakes for calcium, iron, folate, magnesium, zinc, vitamin A, and the B vitamins

As regarding vit A the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$). it was 346.435 ± 130.958 and 385.773 ± 128.828 respectively. These result agree with (Papadopoulou SK,2002) reported that female adolescent athletes did not consume recommended intakes for vit A.

As regarding vit C the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$). it was 98.406 ± 37.236 and 94.193 ± 31.558 respectively .These result agree with (Rankinen et al., 1998) who reported that difference in vitamin C intakes were similar between group.

As regarding folate the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$). it was 274.501 ± 73.494 and 281.757 ± 63.823 respectively. these result agree with with (Rankinen and associates 1998) who reported that difference in energy intake, thiamine, riboflavin, folate, vitamin C, calcium, and iron

intakes were similar between group (Papadopoulou SK,2002)reported that female adolescent athletes did not consume recommended intakes for folate.

As regarding vit B1, Vit B2, Niacin, vit B6 the mean for female group in faculty of law and female in faculty of physical education was non significantly ($p>0.05$).These result not agree with (kern, 2006);(Thompson, 1998) who reported that nutrition in which young athletes are most often deficient is vit B and folate

Table 7 : food habit for male

	Physical male		Law male	
	No.	%	No.	%
Eating three meals				
yes	29	82.9	20	57.1
no	6	17.1	15	42.9
Total	35	100	35	100
Eating breakfast				
yes	30	85.7	23	65.7
no	5	14.3	12	34.3
Total	35	100	35	100
Vegetables				
Yes	22	62.9	20	57.1
no	13	37.1	15	42.9
Total	35	100	35	100
Meat				
Yes	33	94.3	33	94.3
no	2	5.7	2	5.7
Total	35	100	35	100
Fruit				
yes	34	97.2	35	100
no	1	2.9	0	0
Total	35	100	35	100
Starches				
yes	20	57.1	16	54.3
no	15	42.9	19	45.7
Total	35	100	35	100
Dairy				
Yes	33	94.3	30	85.7
no	2	5.7	5	14.3
Total	35	100	35	100
Eating fast food				
Yes	32	91.4	29	82.9
No	3	8.6	6	17.1
Total	35	100	35	100
Fast food reason				
Inadequate	30	85.7	26	74.2
Not exist	2	5.7	3	8.6
Not take fast food	3	8.6	6	17.2
Total	35	100	35	100
Follow diet				
Yes	5	14.3	4	11.4
no	30	85.7	31	88.6
Total	35	100	35	100

As regarding food habit data among male in physical faculty and faculty of law:

About 62.9% of physical faculty male eating vegetables and about 57.1% of male in faculty of law eat it.

About of 97.2% physical education faculty male eating fruits and about 100% of male in faculty of law eat it.

About of 94.3 % physical education faculty male eating dairy product and about 85.7% of male in faculty of law eat it

(Croll, 2006) reported that athletes consume more dairy products, fruit, vegetables, vitamins and minerals compared to peers who do not engage in sports. these result agree with our study in vegetables and dairy products but disagree with our study in fruits.

About of 57.1 % physical education faculty male eating starch and about 54.3% of male in faculty of law eat it. These agree with(Cavadini, 2000) who found that athletes consume more cereals, dairy products, fruit, vegetables, larger quantities of carbohydrates, fiber, minerals and vitamins.

About of 85.7 % physical education faculty male eating breakfast and about 65.7 % of male in faculty of law eating breakfast. These agree with(Jacobson, 2001) who reported that 13% of athletes male regularly skipped breakfast.

Table 5 : food habit for female

	Physical female		Law female	
	No.	%	No.	%
Eating three meals				
yes	28	70	31	77.5
no	12	30	9	22.5
Total	40	100	40	100
Eating breakfast				
yes	30	75	33	82.5
no	10	25	7	17.5
Total	40	100	40	100
Vegetables				
Yes	22	55	20	50
No	18	45	20	50
Meat				
Yes	39	97.5	38	95
No	1	2.5	2	5
Total	40	100	40	100
Fruit				
yes	40	100	40	100
no	0	0	0	0
Total	40	100	40	100
Starches				
yes	19	47.5	26	65
no	21	52.5	14	35
Total	40	100	40	100

	Physical female		Law female	
	No.	%	No.	%
Dairy				
Yes	35	87.5	35	87.5
No	5	12.5	5	12.5
Eating fast food				
Yes	32	80	33	82.5
No	8	20	7	17.5
Total	40	100	40	100
Fast food reason				
Inadequate	25	62.5	28	70
Not exist	7	17.5	5	12.5
Not take fast food	8	20	7	17.5
Total	40	100	40	100
Follow diet				
Yes	4	10	2	5
No	36	90	38	95
Total	40	100	40	100

Table (1) shows food habit data among female in physical faculty .faculty of law

About of 75% physical education faculty female skipped breakfast and about 82.5% of female in faculty of law skipped breakfast.

These agree with (Jacobson, 2001) who reported that more than 20% of athletes female regularly skipped breakfast.

About 55% of physical faculty female eating vegetables and about 50% of female in faculty of law eat it.

About of 40% physical education faculty female eating fruits and about 40% of female in faculty of law eat it.

About of 35 % physical education faculty female eating dairy product and about 87.5% of female in faculty of law eat it

(Croll, 2006) reported that athletes consume more dairy products, fruit, vegetables, vitamins and minerals compared to peers who do not engage in sports. These result disagree with our study in vegetables, dairy products and fruits.

About of 47.5% physical education faculty female eating starch and about 65% of female in faculty of law eat it.

These not agree with(Cavadini, 2000) who found that athletes consume more cereals, dairy products, fruit, vegetables, larger quantities of carbohydrates, fiber, minerals and vitamins.

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