

Hábitos alimentares e atividade física de universitários da área de saúde do município de Petrolina-PE.

Eating habits and physical activity of health area university in the municipality of Petrolina-PE.

Hábitos alimentarios y de actividad física de area de salud universidad de municipio de Petrolina-PE.

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RESUMO: A pesquisa teve o objetivo de conhecer os hábitos alimentares e o nível de atividade física de estudantes do primeiro e último ano dos cursos de saúde da Universidade de Pernambuco, *Campus* Petrolina. Trata-se de um estudo do tipo transversal, descritivo e observacional, realizado com estudantes dos cursos de nutrição, fisioterapia e enfermagem da Universidade de Pernambuco (UPE), *campus* Petrolina. Os instrumentos utilizados foram o Questionário “Como está sua alimentação?”, proposto pelo Ministério da Saúde, e o questionário Internacional de Atividade Física (*International Physical Activity Questionnaire*) adaptado. A amostra foi composta por 155 acadêmicos dos cursos de saúde da universidade, dos quais 102 (65,8%) eram ingressantes e 53 (34,2%) concluintes, com predomínio de indivíduos do sexo feminino. A média de idade foi de 21,7

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($\pm 3,5$) anos. Os estudantes apresentaram inadequada ingestão de frutas. O consumo de verduras e legumes esteve dentro do padrão das recomendações diárias para esse grupo de alimentos. Em relação à ingestão de água entre os participantes, tem-se que 72,26% destes não bebem a quantidade recomendada, observou-se diferença significativa ($p < 0,05$) neste quesito. A proporção de alunos classificados como sedentários foi de 7,8% para os do primeiro ano e 1,9% para o último ano. O estudo verificou inadequação de hábitos alimentares, como o reduzido consumo de frutas e a pouca ingestão de água, além do baixo nível de atividade física entre os estudantes dos cursos analisados, observando-se que, mesmo sendo acadêmicos da área da saúde, nem sempre conseguem efetivar na prática aquilo repassado na teoria.

Palavras-chave: Qualidade de vida, hábitos alimentares, estilo de vida sedentário, estudantes.

ABSTRACT: The research aimed to know the eating habits and level of physical activity of students in the first and final year of health courses at the University of Pernambuco, Petrolina Campus. This - is a cross-sectional study, descriptive and observational, conducted with students of nutrition courses, physiotherapy and nursing at the University of Pernambuco (UPE), Petrolina campus. The instruments used were the questionnaire "How is your food?" Proposed by the Ministry of Health and the adapted International Physical Activity Questionnaire (International Physical Activity Questionnaire). The sample consisted of 155 academics from the university health courses, of which 102 (65.8%) were freshmen and 53 (34.2%) seniors. With a predominance of females. The average age was 21.7 (± 3.5) years. Students have had an inadequate intake of fruit. The consumption of vegetables was within the standard daily recommendations for this group of foods. Regarding the water intake among the participants, it has to be 72.26% of them do not drink the recommended amount, there was a significant difference ($p < 0.05$) in this topic. The proportion of students classified as sedentary was 7.8% for the first year and 1.9% for the last year. The study found inadequate dietary habits, such as reduced intake of fruit and a little water intake, in addition to the low level of physical activity among students of the analyzed courses, noting that even if academics of health care, not always can carry out in practice what studied in theory.

Key words: Quality of life, eating habits, sedentary lifestyle, and students.

RESUMEN: La investigación tuvo como objetivo conocer los hábitos alimenticios y el nivel de actividad física de los estudiantes en el primer y último año de las carreras de salud de la Universidad de Pernambuco, Campus Petrolina. Se trata de un estudio transversal, descriptivo y observacional, realizado con alumnos de las carreras de nutrición, fisioterapia y enfermería en la Universidad de Pernambuco (UPE), Campus Petrolina. Los instrumentos utilizados fueron la encuesta "¿Cómo es tu alimentación?", propuesto por el Ministerio de Salud, y la encuesta internacional sobre actividad física (International Physical Activity Questionnaire) adaptada. Participaron en la investigación 155 universitarios de las carreras de salud, de los cuales 102 (65,8%) eran estudiantes de primer año y 53 (34,2%) graduados, con predominio del sexo femenino. La edad media fue 21,7 ($\pm 3,5$) años. La encuesta demostró que los estudiantes consumen frutas de manera inadecuada. El consumo de verduras estaba dentro de las recomendaciones diarias estándar para este grupo de

alimentos. En relación a la ingesta de agua entre los participantes, se verificó que 72,26% de ellos no beben la cantidad recomendada, y no hubo una diferencia significativa ($p < 0,05$) en este sentido. La proporción de estudiantes clasificados como sedentarios fue de 7,8% para el primer año y de 1,9% para los que cursan el último año. Se comprobaron hábitos alimentarios inadecuados, como la reducción de la ingesta de frutas y poca ingesta de agua, además de un bajo nivel de actividad física entre los estudiantes de las carreras analizadas, y se observa que, aunque son académicos de la salud, no siempre se lleva a cabo en la práctica lo que se dice la teoría.

Palabras clave: calidad de vida, hábitos alimenticios, sedentarismo, estudiantes.

1 INTRODUCTION

Healthy eating habits, i.e., in recommended quantities and characteristics, ensure a good quality of life for the individuals and are based on their nutritional needs, according to their daily activities^{1,2}. However, they may be influenced by various factors, such as occupation, time availability, culture, religion, purchasing power, as well as the integration in the academic life^{3,4}. Many of these habits, which can even be acquired by students during the years studied in the universities, continue in their professional lives⁵.

Physical activity usual practice is characterized as an important component for the lifestyle associated with health conservation and promotion. Evidences made available in the literature suggest that physical activity practiced in adequate quantity and intensity may reduce the relative risk of onset and developing chronic-degenerative disorders, such as heart diseases, hypertension, obesity, type-2 diabetes mellitus, osteoporosis, and certain cancer types⁶⁻⁸.

The relationship of physical activity and food with health has been studied for many years, and the results confirm that practicing regular physical activity and a balanced diet, act directly in preventing Chronic Non-Transmittable Diseases (CNTD)⁷. However, despite the academic population being aware on the benefits from such healthy habits, there seems to be some resistance on effective adherence to these practices^{7,9}.

When observing the coexistence in the university environment, it is noted that nutrition and physical activity level of students do not always follow the recommendations for a healthy lifestyle. Researches that assessed eating habits of academics have shown the prevalence of sweet and fatty food intake, in detriment to the intake of fruits and vegetable^{1,4,7}. Additionally, studies show that most students have a sedentary lifestyle, or are not active enough to achieve the benefits for health from physical activity⁸⁻¹⁰.

Works reporting the food intake and physical activity behavior of university students are limited. So, it is not established if colleges and universities provide opportunities for positive influence behaviors with respect to practicing physical activity, nutrition and weight maintenance in educational environment^{2,5}. Based at this conjuncture, it is important to get the correct characterization of this

population with respect to these aspects for a possible intervention in preventing and promoting health, contributing to improving quality of life. In this sense, this study aimed to know the eating habits and physical activity level of students from the first and last year of health courses at the University of Pernambuco, Petrolina Campus.

2 MATERIALS AND METHODS

This study is characterized by having cross type, descriptive and observational design. The population was made up by individuals of both genders, students in the first and last year in nutrition, physiotherapy, and nursing courses at the University of Pernambuco (UPE), campus Petrolina Campus. The research was previously approved by the Research Ethics Committee of the University of Pernambuco under CAAE No. 36505614.1.0000.5207. All volunteers signed the Free and Clarified Consent Form (FCCF), after being informed on the research protocol.

The students who participated in the research met the following inclusion criteria: age less than 18 years and duly enrolled in the first or last period of health courses at the university. As exclusion criteria the research adopted the fact that they have no ties with the University, not studying the first or the last year of college or presenting incomplete data/questionnaires. The sample was made up by 155 students from three health courses of UPE. The questionnaires were applied at the institution's premises from November, 2014 to March, 2015.

The used instruments were the Questionnaire "How is your food intake?" proposed by the Ministry of Health ¹¹. This contains questions about eating habits, introducing qualitative and quantitative questions. The assessment on the consumption of daily servings of fruits, vegetables and legumes, greens, meats and eggs was compared and classified, as appropriate or inappropriate, according to the guidelines suggested by the Pyramid Adapted to the Brazilian Population ¹² and water according to the Ministry of Health ¹³.

The International Physical Activity Questionnaire-IPAQ) ¹⁴ - short version, adapted with the introduction of an identification form containing questions related to social-demographic and personal data, having eight questions that permit to estimate the time spent weekly on different dimensions of physical activity. The interpretation of the answers to these questions can sort the individual as very active, active, irregularly active, and sedentary.

Study variables were entered into a database in Excel 2010 software, analyzed through average, standard deviation and percentages, then data were processed and evaluated in databases created through IBM SPSS Statistics software, version 20.0, with results displayed through charts and graphs in terms of absolute (N) and relative (%) frequencies and, then, Chi-square test of Pearson ($p < 0.05$) was applied for analyzing the associations among variables.

3 RESULTS

Research participants were scholars in nutrition, physiotherapy and nursing courses of UPE, totaling 155 individuals, of whom 102 (65.8%) were freshmen and 53 (34.2%) seniors in such courses. Of this total, 24 (15.5%) were male and 131 (84.5%) female. Average age was 21.7 (\pm 3.5) years. Most students said being single (92.3%), with wage income ranging from 1 to 3 (43.9%) minimum wages.

Table 1 illustrates the consumption's adequacy and inadequacy percentages for some food groups and water. In relation to consumption of fruits, the students showed inadequate intake of this food group (72.9%). The consumption of vegetables and legumes (87.1%) was within the standard daily recommendations for this food group.

Most students (74.2%) consumed legumes four times or more per week, staying within the recommendation. With respect to meat and eggs intake, the result pointed to consumption suitability, because most students (78.06%) ingested quantities of this food group according to the recommendation standards.

In relation to water intake among the participants, 72.26% of them do not drink the recommended amount, which represents a negative factor in eating habits. It is still highlighted that in relation to the course years, there was a significant difference ($p < 0.05$) in this regard, indicating that first-year students have a lower consumption compared to those of last year.

TABLE 1 - Percentage of consumption adequacy and inadequacy for food groups in university students. Petrolina-PE, 2015.

Food Groups	Portions considered appropriate (n)	Total students with food intake				Year of course with less consumption ($p < 0.05$) #
		Adequate		Inadequate		
		N	%	N	%	
Fruits *	3	42	27.10	113	72.90	NS
Vegetables and legumes*	3	135	87.10	20	12.90	NS
Legumes *	1	115	74.20	40	25.80	NS
Meat and Eggs *	1	121	78.06	34	21.94	NS
Water **	2 L (8 cups)	43	27.74	112	72.26	First year

Source: Prepared by the authors, 2015.

Using Pearson's Chi-square test/NS - not significant.

* Pyramid Adapted to the Population Brasileira12/* * Ministry of Health ¹³.

Table 2 displays the dietary practices among university students. One can check adequacy for all food behaviors evaluated, such as removing the apparent fat from beef or chicken (66.45%), avoiding consumption of fried foods, sausages or sweets (69.03%), appropriate use of fat in food preparation (75.48%), not adding salt at meals (94.2%), no exchanging meals for snacks (50.33%) and 86.45% rarely/never consume alcoholic beverages.

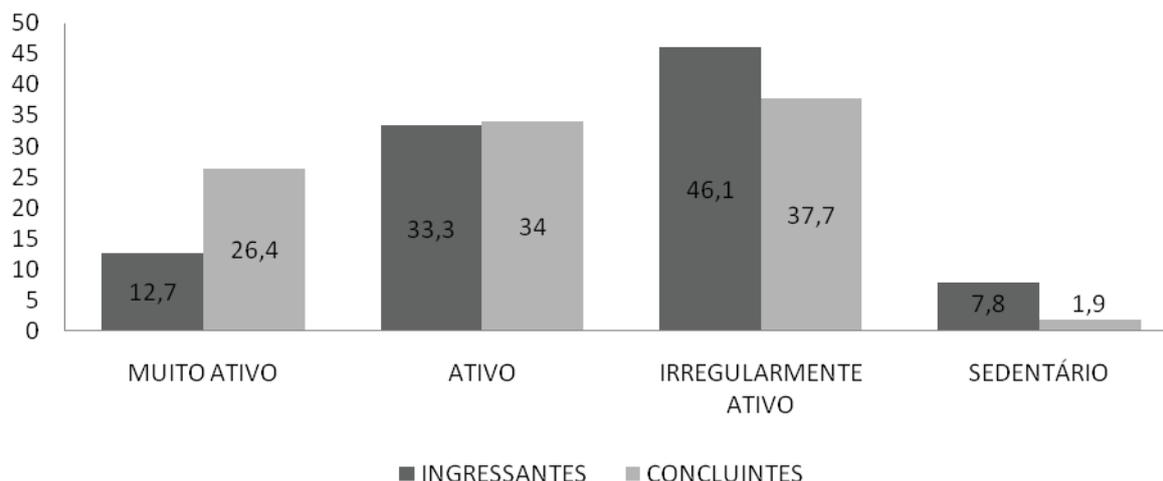
TABLE 2 – Classification of dietary practices among university students. Petrolina-PE, 2015.

Variable	Classification	N	%	Year course with a higher % of inadequacy (p<0.05)#
Removing the apparent fat from meat and/or chicken	Adequate	103	66.45	NS
	Inadequate	52	33.55	
Usually consuming fried foods, sausages or sweets	Adequate	107	69.03	NS
	Inadequate	48	30.97	
Kind of fat to cook the foods	Adequate	117	75.48	NS
	Inadequate	38	24.52	
Usually putting more salt in food	Adequate	146	94.20	NS
	Inadequate	9	5.80	
Usually exchanging lunch/dinner for snacks	Adequate	78	50.33	NS
	Inadequate	77	49.67	
Alcoholic beverage consumption	Adequate	134	86.45	NS
	Inadequate	21	13.55	

Source: Prepared by the authors, 2015.

Using Pearson's Chi-square test/NS - not significant.

The results found with respect to the levels of physical activity (Chart 1) show that the ratings that predominated among students were irregularly active, where 46.2% of freshmen received this rating, and active, with 33.3% freshmen and 34% seniors. Individuals classified as very active were 12.7% and 26.4%, freshmen and seniors, respectively. The proportion of students classified as sedentary was 7.8% for the first year and 1.9% for the last year. However, no significance was observed between the level of physical activity and student course year, being $p > 0.05$.

CHART 1 - Physical activity level percentage for university students. Petrolina-PE, 2015#.

Source: Prepared by the authors, 2015.

Using Pearson's Chi-square test.

4 DISCUSSION

This study analyzed university student eating habits, from health courses of UPE, seeking to know the consumption of food groups and evaluated students' physical activity level. One of the main findings of this study was the inadequacy of eating habits of university students with respect to fruit consumption. Such results are consistent with those described by VIGITEL (2011)¹⁵ research that checked their low consumption by the Brazilian population, pointing out just 20.2% of adequate consumption for this food group. Some authors indicate that there is an improvement in consumption of protecting food groups, like fruits, while the students progress in the course¹⁶.

University students generally do not follow healthy eating habits. The typical food of university students is rich in fat and insufficient in fruits and vegetables and, still according to Yahia et al. (2008)¹⁷, students often choose fast food, due to availability and convenience. According to Moreira et al. (2013)¹⁸, food intake with a predominance of foods that are rich in whole grains, fruits, and vegetables is associated with a decrease in exposure to risk for chronic diseases.

Regarding intake of vegetables, legumes, greens, meat and eggs, the consumption of these food groups was appropriate according to daily recommendations. With respect to the first three food groups cited, there was a satisfactory consumption among adults in other studies carried out in different Brazilian municipalities^{19,20}. Fang et al. (2010)¹⁶, in a work with students at a university, they found similar results, reporting that consumption of meat and eggs was adequate according to the recommendations.

Coutinho et al. (2007)²¹, highlight the importance for consumption of meat and eggs in the addressed population, as they are a rich source for protein and iron. Proteins are essential for forming and maintaining body tissues and the iron present in these foods operates mainly in the synthesis of red blood cells and in the transport of oxygen and carbon dioxide to every cell in the

body, in addition to being part of enzymes related to cell respiration. Their deficiency leads to anemia, which has fatigue as one of the main symptoms, that may compromise student's academic performance ^{21,22}.

Most students showed inadequate water consumption, with significant difference between freshmen and seniors, which shows a likely change in this habit related to the course year. Such results differ from those observed in a study with students from a public university when it was found that 58% drink the recommended water amount ¹⁶. This is a concerning result, since water is essential for the proper body's functioning, and most of metabolic activities depend on it to work properly ²³.

As for eating habits, very positive results were found, since that excessive intake of fried foods, meats, sweets, fats and salt is concerning for offering health risks, which may cause heart diseases by increasing cholesterol and triglycerides rates, as they are foods that are rich in simple carbohydrates, lipids and unsaturated fatty acids that contribute to the onset of dyslipidemia, obesity, diabetes and hypertension ²⁴.

With regard to the exchange of meals (lunch/dinner) for snacks, approximately half of the studied population performs this substitution. Reato et al. (2007) ²⁵ analyzed the eating habits of students and observed that substituting lunch or dinner for snacks took place once or twice a week for 40% of respondents. In this same study, fatty foods were the ones that stood out as an exchange at lunch and, at dinner, also sweets and food usually eaten for breakfast, which, in general, are within easy reach and preparation for consumption, were cited ²⁶. Replacing lunch and/or dinner for snacks reduces the consumption of traditional foods, which are important sources of vitamins, minerals and fiber, which can lead to future health problems when replaced with high-density energy foods ^{27,28}.

The research also found low alcoholic beverage consumption among the investigated students, which opposes studies, such as Faria et al. (2014) ²⁹ that say that the pressure of academic activities, the need to be part of the group, the unit price accessible of alcoholic beverage and the absence of prohibition for alcohol consumption in university environment were some causes related to ingestion of alcoholic beverages among university students.

With respect to physical activity level, there was a tendency toward inactivity particularly among freshmen, although a significant difference was not verified with respect to the course year. This phenomenon has also been described in two studies, one Canadian and one Brazilian. In the first case, after entering the university the 31.1% of students were insufficiently active ³⁰, and in the second, in a university of the State of Minas Gerais, only the students from the physical education course, among all the other students, kept constant the level of physical activity during graduation ³¹.

The prevalence of physical inactivity among young university students seems to be resulting from a multiplicity of factors, including the current time where the highly competitive job market requires increasingly skilled professionals generating, as the course progresses the search for activities that facilitate their ingress. University students engage increasingly in academic and extracurricular activities, not prioritizing the practice of physical activity, a component essential for disease prevention and health maintenance. Other relevant aspects may be the personal barriers imposed by students, such as lack of money and companionship for practicing physical activity, apart from the lack of motivation ^{30,32,33}.

The practice of physical activity and good eating habits are beneficial to health and therefore should be encouraged in university environment. It is known that the students are continually subject to works, deadlines, and long study hours and of physical and mental exhaustion situations. A research carried through with university students identified that accomplishing sport programs in the free periods diminishes the references to discomforts in relation to health ³¹.

A study done with medical students at the University of Health Sciences of Alagoas (UNCISAL) came to the conclusion that as the academics are approaching the course end, the prevalence of overweight increases ³⁴, probably due to the decrease in the level of physical activity during the course. This fact is rather worrying, because the herein evaluated students are in their first and last year of graduation, and as much as the other academics that have opted for the health area, in a short time, they will be considered as multipliers for healthy lifestyles.

We also observed, unintentionally, the discrepancy in the number of freshmen and seniors in the course, once the freshmen samples (n = 102) and graduation students (n = 53) showed large variation in student number. This fact can be justified by the great student evasion in health courses. Walter (2006) ³⁵, reviewing studies in the area, found various results that indicate high evasion rate in health courses. These researches accounted an evasion index of approximately 50% and identified, as reasons, the following aspects: lack of time, study conditions, personal organization, and lack of satisfaction for personal expectations ^{35,36}.

5 CONCLUSION

This study verified unsuitability of some eating habits, such as low consumption of fruit and the low water intake, in addition to low level of physical activity among students in the analyzed courses, noting that, even though the academic students are from the health area, they do not always get to effect in practice what is passed in the theory. The obtained results showed that most of the time there was no significant difference between the evaluated conducts of freshmen and seniors. Thus, the healthy lifestyle habits encouraged by the courses do not seem to be realized by the evaluated students.

It is necessary, therefore, to deepen the debate on this subject during the training of health

professionals and show the importance of incorporating in their daily lives the learned about healthy eating and regular exercise practices in the classroom. It is suggested to develop similar studies, such as, extension projects to stimulate students to meet the recommendations for healthy eating and physical activity.

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Paper presented at 15/09/30

Approved on 2/16/25

Article published on the system 28/03/16