

# COMPARISON OF LIFESTYLES - STUDENTS OF FACULTY OF MEDICINE AND LAW FACULTY AT THE PAVOL JOZEF SAFARIK UNIVERSITY IN KOSICE

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**Abstract:** *In the study we compared the results of questionnaire research of selected lifestyle factors. We aimed at students of the University of P. J. Šafárik - 4 graders of Medicine (FoM) and Law Faculty (FoL) with a focus on some lifestyle determinants such as nutrition, physical activity, alcohol and drugs, smoking. The research was done in December 2010 at FoM and FoL of the University of Pavol Jozef Safarik in Košice using an anonymous questionnaire. The reference group consisted of 300 students, of which there were 73.2 % of girls and 27.5 % boys from FoM and 55.1 % female and 44.9 % male students from the Faculty of Law aged from 21 to 26 years. Based on the results it was shown that medical students compared with students of the Faculty of Law smoke and consume alcoholic beverages less, but on the other hand, probably because of demanding study, they are less devoted to sports and they consume more pharmaceuticals. For both groups, almost one third of respondents consumed 1-2 times a week smoked products and products of fast food. Only one forth of respondents consumed fruit and vegetables daily. Deficiencies in dietary habits and also other lifestyle factors affecting healthy subjects could be improving, particularly at students of FoL and other non-health departments of universities by the adoption of health promotion courses. But the possibilities of prevention of chronic diseases should be introduced also at elementary and high schools.*

**Key words:** *lifestyle, students, nutrition, physical activity, smoking, alcohol*

## Introduction

Health is one of the most important values of every human life.

Health is contingent upon whether and the extent to which individual citizens can contribute to the protection, maintenance and development of their own health (1). Lifestyle is the behavior of people in the environment (physical, social, economic), with regard to their ethnicity, culture and education (2). It contributes to the overall health status of 60 % to 70 %. Lifestyle, especially in relation to good nutrition and

physical activity is one of the most important determinant affecting human health (3). Unhealthy way of life affects premature mortality, mainly caused by cardiovascular diseases and cancer (4). A healthy lifestyle means sustaining human behavior and promoting health in the circumstances. Smoking, lack of physical activity contributing to overweight, excessive alcohol consumption and unhealthy diet are among the main risk factors that cause the emergence of noninfectious diseases. Individuals which are more responsible and educated, have a healthier lifestyle and lower incidence of noninfectious diseases (5) .

## Objective

The subject of our research was to analyze the lifestyle. Using the questionnaire forms, we verified, summarized and compared the theoretical knowledges of third grade students of the Faculty of Law (FoL) and medical students at the Faculty of Medicine (FoM), University of Pavol Jozef Safarik in Kosice. Subsequently, we analyzed differences in selected lifestyle determinants of both study groups.

## Material and methods

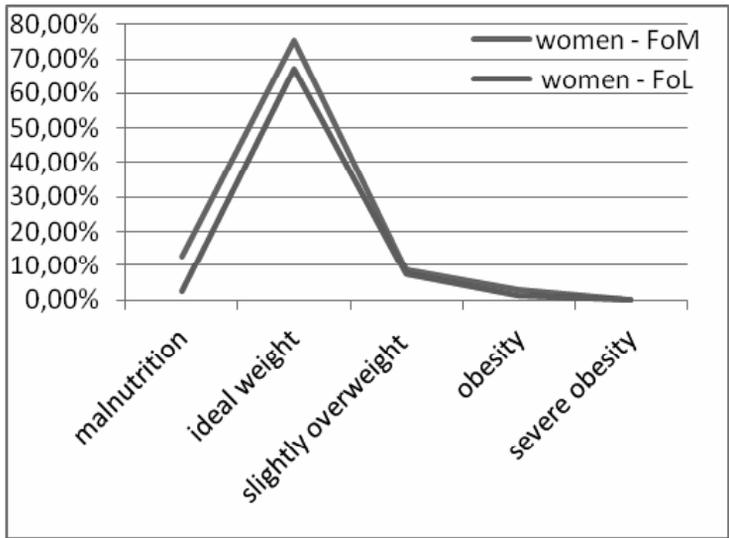
The research has been started in December 2010 at two faculties of the University of Pavol Jozef Safarik in Kosice with various specializations, Faculty of Medicine and Faculty of Law.

Data collection was performed by using an anonymous questionnaire, which consisted of 39 broad questions. Data collection was performed using an anonymous questionnaire, which consisted of 39 broad questions. Return on total (n = 300) was 98,7 %, of which (n = 109) 73,2 % of women of the Medical Faculty and (n = 41) 27.5 % men of the Medical Faculty. In Faculty of Law it was (n=81) 55,1 % of women and (n=66) 44,9 % of men. The research sample consisted of 300 respondents aged 21-26 years (3rd year students). The questionnaire includes general information on student, smoking, alcohol, stress, physical activity, health, nutrition, genetic predisposition. For this project we chose to assess and compare the weight of respondents, using of alcohol and tobacco products and nutritional status.

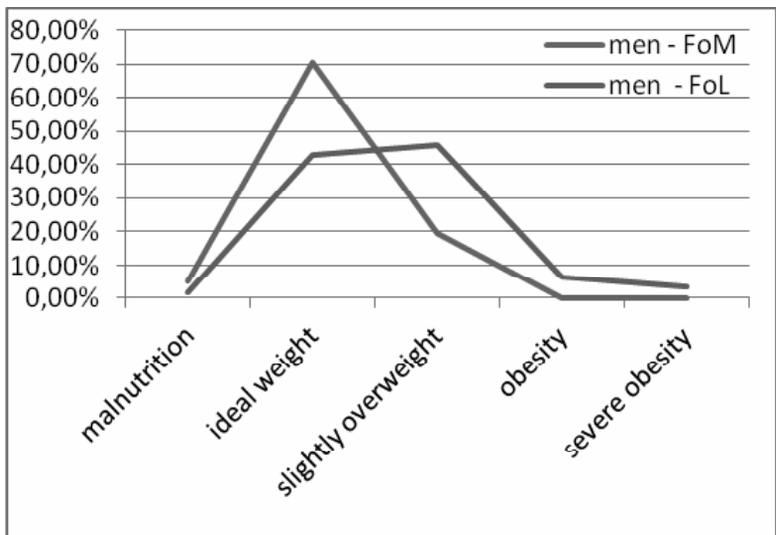
The results of the questionnaires are processed in Microsoft Excel, using t - test and other basic mathematical statistics.

## Results and discussion

**Body weight** is one of the individual parameters of the human and is derived from the balance of income and expenditure of energy in the body. Already a slight increase in weight above the normal value may be associated with health problems and contribute to the emergence of other diseases. Accurately determine the ideal weight is not possible, its estimate is based mostly on the statistical comparison (1). Therefore, we used the most well-established method of BMI (body mass index). Comparison of BMI for men and women in both groups are presented in the following graphs.



**Graph 1. BMI women**



**Graph 2. BMI men**

Malnutrition in women of Medical faculty is more pronounced for 10,44 %, compared with women of the Faculty of Law (Graph 1).

BMI graphs for women with few exceptions, are almost similar, therefore we can conclude only minimal differences in the results of BMI in women.

In men, the results are considerably diverse. Slightly overweight have 26,5 % more students of Faculty of Law than students of Faculty of Medicine. The ideal weight have 70,73 % of respondents from Faculty of Medicine, which is 27,9 % more than the

law students (Graph 2). A similar study at the Medical Faculty of Comenius University in Martin was implemented by authors Janušová and Szárázová, that decades devoted to assessing the nutritional status of students of faculty indicate that compared with the results of ten years ago, the students of Medicine confirmed the upward trend in prevalence of obesity and overweight, with more males than females (6, 7).

**Smoking** is currently the most widespread habit of mankind. It has become not only a major social phenomenon, but also a huge health problem leading to the often fatal consequences in the form of severe diseases such as lung cancer and others. Smoking also increases the risk of malignancy in other organs (8). Smoking shortens life by an average of seven years compared to non smoker or former smoker. Addiction affects the success of smoking cessation. Daily smokers have a higher probability that they fail to quit smoking. In Slovakia, we have about 38 % of smokers, of whom about 20 % of regular smokers depending, on where the risk is much higher (9, 10) Seven out of ten smokers trying to quit smoking. Consequences of smoking are manifested primarily on physical health, but long-term smoking also as a psychical dependence (11). Comparison of the use of tobacco products are summarized in the following table.

**Tab.1 Selected indicators of smoking**

	Proportion of smokers	Number of smokers	Average length of smoking / year	SD	min. - max.	p
FoM	12,40 %	n = 18	5,14	2,35	1 - 10	NS
FoL	22,00 %	n = 33	6,36	2,21	1 - 12	

statistical significance < 0,05 \*

**Tab. 2 Comparing the average number of cigarettes smoked per day during the semester and examination period**

	Semester	SD	min. - max.	p	Examination period	SD	min. - max.	p
FoM	6,05	3,90	1 - 15	NS	7,10	5,20	1 - 20	NS
FoL	8,31	6,25	1 - 24		11,93	9,44	2 - 40	

statistical significance < 0,05 \*

Law students smoke up to 9.6 % more than medical students. On average, students of Faculty of Law during the semester smoke by 2,3 cigarettes more and examination periods of up to almost 4 cigarettes more than students of Faculty of Medicine. Increase the number of cigarettes smoked in both groups in the exam period is probably caused by stress. Scientific knowledge of the past few years clearly demonstrates the impact of smoking on the emergence of many diseases, which often end with the death. It is estimated, that nearly the entire 1/5 of deaths worldwide are caused by smoking (1).

**Alcohol** and it's excessive intake is in present social and health problem. Alcohol consumption is increasing and thus increasing the negative consequences such as

increased accident rates, morbidity, disability, premature death, the spread of sexually transmitted diseases, problems in work and personal life, and so on.

In Slovak republic in 1990, in one person consumed 14,2 liters of 40 % alcohol, 95,6 liters 15,9 liters of beer and wine (12). Compared 1996 increased the number of people who do not drink spirits, from 28 % to 33 %. Slovakia belongs to countries with the highest consumption of pure alcohol per person per year. Consumption in the Czech republic is higher and increases, as well as in Finland. In contrast, in France the alcohol consumption consistently decreasing, similiary consumption decreases in countries in the EU (13).

In our observed sample of respondents, we came to the following results of consumption of alcoholic beverages between the two groups being compared.

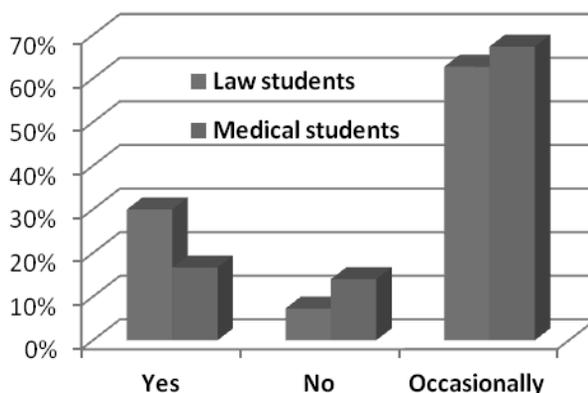
**Tab. 3 Consumption of alcoholic beverages, Graph 3 Consumption of alcohol one person / year among students**

	<b>Beer</b>	<b>n</b>	<b>SD</b>	<b>Min.- max.</b>	<b>p</b>
FoM	64,32 l	63	88,47	0,5 - 384	0,009
FoL	161,81	60	127,69	6 - 480	

	<b>Wine</b>	<b>n</b>	<b>SD</b>	<b>Min.- max.</b>	<b>p</b>
FoM	11,56 l	85	122,68	10 - 960	0,007
FoL	23,42 l	80	147,26	4 - 480	

	<b>Spirits</b>	<b>n</b>	<b>SD</b>	<b>Min.- max.</b>	<b>p</b>
FoM	6,24 l	73	83,66	1 - 480	0,003
FoL	15,45 l	77	103,56	6 - 480	

statistical significance < 0,05 \*



**Graph 3 Consumption of alcohol among students**

Consumption of beer is for law students 2,5 times higher, consumption of wine about 2 times higher and the consumption of spirits also 2,5 times higher than for medical students. Up to 30% of lawyers have the active consumption of alcohol, which is almost 2 times higher than the number of medical students.

**Nutrition** - Healthy nutrition is important to ensure normal function of the body in adults and in childhood, also for normal physical and mental development. It should contain sufficient macronutrients and energy to cover the functional requirements of the organism and adequate quantity of fluids, minerals and micronutrients (14).

Differences in the nutrition of respondents were minimal. It must however be noted, that 27,3 % students of Faculty of Medicine and 23,3 % students of Faculty of Law consume smoked products from 1 to 2 times per week, 27,30 % students of FoM and 26,35 % students of FoL eat fast food products 1 to 2 times per week, which may have causal relationship with digestive problems, indicated by 33 % of all students.

Daily fruit consumption is indicated by 25,3 % students of FoM and 27,2 % students of FoL and daily vegetable consumption only by 24 % medical students and 17,5 % students of law, what is a very low percentage.

## Conclusion

General advice on healthy lifestyle in the area of smoking and alcohol use applied in practice on students lifestyle is more often observed by students of Faculty of Medicine, because a health promotion is the part of their education.

On the other side, they don't have achieve satisfactory results in the field of healthy nutrition, very often for lack of interest in the issue of healthy eating.

Smoking and alcohol are among the most important risk factors for lifestyle diseases. We found, that more respondents from the Faculty of Law and to a greater extent succumb to such dependencies. Their impact may cause increased incidence of lifestyle diseases. We therefore propose to include the subject of health promotion in the curricula for non-medical faculties at universities.

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## **POROVNANIE ŽIVOTNÉHO ŠTÝLU POSLUCHÁČOV LEKÁRSKEJ A PRÁVNICKEJ FAKULTY UPJŠ V KOŠICIACH**

**Abstrakt:** V štúdií sme porovnávali výsledky dotazníkového výskumu vybraných faktorov životného štýlu poslucháčov Univerzity P. J. Šafárika v Košiciach zo 4. ročníkov Lekárskej (LF) a Právnickej fakulty (PF) so zameraním na niektoré determinanty životného štýlu, ako je výživa, fyzická aktivita, konzumácia alkoholu a liečiv, fajčenie. Výskum sme realizovali v decembri 2010 na LF a PF UPJŠ v Košiciach pomocou anonymného dotazníka. Sledovaný súbor tvorilo 300 študentov; z toho 73,2 % dievčat a 27,5 % chlapcov z LF a 55,1 % študentiek a 44,9 % študentov z Právnickej fakulty vo veku od 21 do 26 rokov. Výsledky boli spracované matematicko-štatistickými postupmi. Na základe výsledkov možno konštatovať, že medici v porovnaní so študentmi Právnickej fakulty výrazne menej fajčia a konzumujú alkoholické nápoje, ale na druhej strane, zrejme z dôvodu náročného štúdia, sa menej venujú športovým aktivitám a viac konzumujú farmaká. Z oboch skupín opýtaných takmer tretina konzumuje 1-2 x týždenne údené výrobky a produkty z fastfoodov. Denne konzumuje ovocie a zeleninu iba štvrtina respondentov. Nedostatky v stravovacích návykoch i u ďalších faktorov životného štýlu, ovplyvňujúcich zdravie jedinca by sa mohli zlepšiť najmä u študentov PF a iných nezdravotníckych odbo-

rov na vysokých školách zavedením predmetu podpory zdravia i keď o možnostiach prevencie chronických ochorení by mala byť edukovaná mládež už na základných školách.

**Kľúčové slová:** životný štýl, študenti, výživa, pohybová aktivita, fajčenie, alkohol