



## Knowledge about physical activity and its everyday use among students of medical university and young employees of fast-food restaurants

### KEYWORDS

students, fast-food restaurants, youth health, healthy behavior, physical activity

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### ABSTRACT

**Introduction.** Physical activity undertaken by people has a crucial influence on their health status and wellbeing. **Aim** of the work was to assess two groups of young people in terms of their knowledge about selected elements of healthy lifestyle (with special attention to physical activity) and using this knowledge in everyday life. **Material and methods.** Material consisted of responses to an anonymous questionnaire of 50 medical university students and 50 fast-food restaurant employees. **Results.** Medical university students have better knowledge in selected elements of healthy lifestyle. It is related with more regular, frequent and intensive physical activity. Students undertake physical activity which duration is longer, nevertheless they spend more time on watching TV and using computer in their free time in comparison with fast-food restaurants employees. **Conclusion.** Both students and fast-food restaurant employees are not used to physical activity which might result in health problems in adult life.

### Introduction

From the time when Marc Lalonde in 1974 published a report on health status of Canadians, the idea of health determinates has changed (Lalonde, 1974). Health status started to be considered as resulting, among others, from peoples' behavior – including physical activity. In spite of many public campaigns promoting health in Poland, many Poles still do not undertake proper physical activity (CBOS, 2012). The reason for this might be insufficient knowledge about healthy lifestyle and willingness to use it and lack of skills (Stasiołek & Jegier, 2003). Health behaviors are also influenced by environment and interpersonal relations.

### Aim

The aim of the work is to verify if there are significant differences in level of knowledge about healthy lifestyle and individual behaviors with particular emphasis on knowledge and opinions on physical activity and eating habits between students of medical university and employees of fast-food type restaurants. It is well known that often eating fast-food meals causes obesity and overweight in children, youth and adults. Number of such restaurants is in increase in most of developed and developing countries. Fast-food restaurants are place which is not in favor for health, accepting behaviors which are commonly considered hazardous. Because of this fact, the authors decided to compare group of fast-food employees with students of medical university as they spend most of their time in completely different surrounding and undergo different influences of environment.

### Material and method

Study groups consisted of 100 randomly selected people aged 19-29 (young people). The study group consisted of two subgroups representing different environment:

**Subgroup 1 – 50 students (30 females, 20 males)**

**Subgroup 2 – 50 employees (29 females, 21 males)**

The material consisted of answers given voluntarily by re-

spondents to an anonymous questionnaire (28 questions considering knowledge about among others recommended amount of physical activity, proper eating habits and using this knowledge in an everyday life).

### Results

#### Part 1. Respondents' knowledge

The first stage of analysis was to determine knowledge of respondents about healthy lifestyle to evaluate it and then confront with activities undertaken by respondents in everyday life. Students and employees of fast-food restaurants were asked about some definitions and recommendations in subject of physical activity and healthy lifestyle. In most of questions asked it has been proven that students had better knowledge (Table 1).

**Table 1. Knowledge of study groups in subject of physical activity and other aspects of healthy lifestyle**

Knowledge of a factor	Study groups			
	Students		Employees	
Recommended amount of physical activity	N	(%)	N	(%)
	yes	34	68	27
no	16	32	23	46
p=0,151241				
Definition of BMI	Students		Employees	
	N	%	N	%
yes	48	96	32	64
no	2	4	18	36
p=0,0001				
Proper number of meals a day	Students		Employees	
	N	%	N	%
yes	49	98	42	84
no	1	1	8	16
p=0.014445				
	Students		Employees	

Proper time of eating last meal a day	N	%	N	%
yes	48	96	34	68
no	2	4	16	32
p=0,000268				
	Students		Employees	
Unhealthy food products	N	%	N	%
yes	44	88	46	92
no	6	12	4	8
p=0,504485				
	Students		Employees	
Phenomenon of delayed satiety	N	%	N	%
yes	20	40	22	44
no	30	60	38	76
p=0,0277776				
	Students		Employees	
Proper amount of milk products	N	%	N	%
yes	49	98	43	86
no	1	2	7	14
p=0,026992				

**Part II. Using knowledge in everyday life Undertaking physical activity**

Next, it was verified if knowledge in subject of healthy lifestyle has impact on regularity of undertaking physical activity. Such relation has been proven (p=0,026291). Same relation has been found for frequency of undertaking physical activity (p=0,00001) and its duration (p=0,03347). Respondents with better knowledge were more active (Table 2).

**Table 2. Undertaking physical activity by respondents with good knowledge and without knowledge of healthy lifestyle**

Regularity	Knowledge=yes		Knowledge=no	
	N	%	N	%
Regular physical activity	34	59,6	16	37,2
Irregular physical activity	23	40,4	27	62,8
p=0,02691				
Frequency	Knowledge=yes		Knowledge=no	
	N	%	N	%
1 per week	7	16,2	30	52,6
2 per week	10	23,3	19	33,3
3,4 per week	16	37,2	7	12,4
>5 per week	10	23,3	1	1,7
Mean	3,07		1,69	
p=0,00001				
Duration of physical activity	Knowledge=yes		Knowledge=no	
	N	%	N	%
No physical activity at all	0	0	2	4,9
<30 minutes	6	10,5	12	29,3
60 minutes	43	75,4	21	51,2
90 minutes	6	10,5	7	17,7
Other	2	3,5	1	2,4

Mean	60	53
p=0,03347		

Next, the same features of physical activity were evaluated in group of students and employees of fast-food restaurants, no matter the level of their knowledge. It has been found that duration of physical activity is significantly higher among students than employees (p=0,048663) (Table 3).

**Table 3. Undertaking physical activity by students and employees of fast-food restaurants (no matter their knowledge)**

Regularity	Students		Employees	
	N	%	N	%
Regular physical activity	41	82	38	76
Irregular physical activity	9	18	12	24
p=0,5425				
Frequency	Students		Employees	
	N	%	N	%
1 per week	14	28	21	42
2 per week	15	30	15	30
3,4 per week	13	26	10	20
>5 per week	8	16	4	8
Mean	2,58		2,12	
p=0,37805				
Duration of physical activity	Students		Employees	
	N	%	N	%
No physical activity at all	0	0	2	4
<30 minutes	4	8	10	20
60 minutes	33	66	34	68
90 minutes	9	18	4	8
Other	4	8	0	0
Mean	63,3		50,9	
p=0,048663				

**Part III. Not undertaking physical activity**

It also has been evaluated why the respondents do not undertake physical activity and how much time they spend on watching TV or using computer e.g. activities not requiring physical activity. Among students most common reason for not being active was aversion to exercise and among employees lack of time. There has been statistically significant differences among study groups in pointing out the reasons for being not active in free time (p=0,005451). The mean number of hours spent on watch TV or using computer was statistically significantly higher in group of fast-food employers than students (p=0,015109) (for employees and students respectively 5,02 and 5,42 hour/day).

**Discussion**

Lifestyle of different social group, especially students, is a common study subject both in Poland and all over Europe. There are only few studies that would evaluate opinions, knowledge and its' using in subject of healthy lifestyle in group of fast-food restaurants employees, who spend most time of their day in an environment selling unhealthy food and influence negatively population's lifestyle. One of the studies that correspond to the subject of fast-food employees is a study of Mulvaney-Day et al. from 2012. In this study the authors presented some factors that increase eating fast-food meals by fast-food restaurant employees. Those factors were: lack of time, low cost, societal connections (acceptation of such food by environment), low-

er awareness of the harmfulness of fast-food type meals through repeated observation of people eager to consume such meals at these restaurants (Mulvaney-Day, Womackb, & Oddo, 2012).

In the presented study, only 54% of medical university students declared undertaking regular, frequent and intensive physical activity. There are studies though in which such activity was significantly higher, like in study by Zarzeczna-Baran et al., in which over 80% of students was undertaking systematic physical active (Zarzeczna-Baran & Wojdak-Haasa, 2007). At the same time, the results of different study proceeded in the medical university but among students from different faculty, have shown that only 44% of students are active in their free time (Kochanowicz, 2007). These are surprising differences maybe resulting from interfaculty specifics. Nevertheless, it is common that level of physical activity of medical university students is in decrease (Krzych, 2004), (Łaszek, Nowacka, & Gawron-Skarbek, 2011), (Nieradko & Borzęcka, 2003).

The results obtained in this study are alarming as both medical university students and fast-food employees are not used to physical activity, and if such tendency is started in young age, it might deeper in adult life, resulting in many health problems associated with hypokinesia.

### Conclusion

1. Students of medical university have better knowledge about proper physical activity and healthy lifestyle than employees of fast-food restaurant – but not in every area.
2. In comparison with fast-food employees, students undertake physical activity which duration is significantly longer.
3. Students do not undertake physical activity more regularly than fast-food employees but at the same time, they spend less time on watching TV and using computer a day.
4. Having good knowledge about healthy lifestyle influence in some extent actions undertaken in everyday life. Persons with better knowledge undertake physical activity significantly more regular, more often and their activity is longer.

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