

DIETARY HABITS OF PHYSIOTHERAPISTS

Vedrana Grbavac^{1,2}, Marija Mandić¹, Marija Govorko³, Vinka Lučić⁴, Nikolina Slišković¹

¹Faculty of Health Studies, University of Mostar, 88 000 Mostar, Bosnia and Herzegovina

²University Clinical Hospital Mostar, 88 000 Mostar, Bosnia and Herzegovina

³Department of Clinical Nursing, University of Dubrovnik, 20 000 Dubrovnik, Croatia

⁴University Department of Health Studies, University of Split, 21 000 Split, Croatia

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ABSTRACT

Introduction: Dietary habits, influenced by regional, cultural, and lifestyle factors, are crucial in maintaining physical and mental health. Healthy eating is often challenging in modern society, where sedentary lifestyles and processed food consumption prevail. Physiotherapists, as healthcare professionals, should set an example in adopting and promoting healthy dietary habits. However, research indicates that they do not always adhere to recommended nutritional guidelines, which may affect their health and professional performance.

Aim: To analyze the dietary habits of physiotherapists and their impact on health and professional efficiency.

Subjects and Methods: A cross-sectional study was conducted at the Faculty of Health Studies, University of Mostar, involving physiotherapists with at least a bachelor's degree. Data were collected via an anonymous online survey using a modified Food Frequency Questionnaire (FFQ). The study examined the frequency of food consumption, intake of sugar and salt, and habits related to fast food, snacks, and alcohol consumption.

Results: Most physiotherapists regularly consumed breakfast (79%), lunch (95%), and dinner (84%), while 61% had snacks. A significant number added sugar to beverages, while salt intake showed no gender differences. Fruit and vegetable consumption was below recommended levels, but cooked meals were preferred, and water intake was adequate. Male participants consumed more beer, while smoking was reported by 22% of respondents.

Conclusion: Although physiotherapists show awareness of healthy eating, improvements are needed, particularly in increasing fruit, vegetable, and fish intake. Nutritional education could enhance their overall health and professional effectiveness.

Keywords: dietary habits, healthy eating, physiotherapists

Corresponding author: Marija Mandić, Master of Physical Therapy;

marija.mandic@fzs.sum.ba

INTRODUCTION

Dietary habits, shaped by regional, cultural, historical, and production factors, have a significant impact on physical and mental health (1). In modern society, where sedentary lifestyles and consumption of processed foods are prevalent, proper nutrition becomes a challenge (2). Unhealthy eating patterns are associated with serious health problems such as obesity, diabetes, heart disease, and cancer, which can lead to premature mortality (3). Physical activity, essential for maintaining health, has a major impact on reducing these risks, but despite its importance, many people face low levels of physical activity, which further exacerbate the effects of poor nutrition (4, 5).

Healthcare professionals, such as physiotherapists, are particularly important in promoting healthy lifestyle habits, including proper nutrition and regular physical activity (6). As professionals involved in rehabilitation and improving body functionality, physiotherapists should be role models in adopting healthy eating habits (6, 7). However, despite their education in physical health, research suggests that physiotherapists are not always consistent in applying healthy eating guidelines in their own lives, which can negatively affect their performance in the professional environment, as well as their general health (8). Considering the importance of nutrition in the rehabilitation process, it is necessary to investigate what the barriers are to adopting healthy eating habits among physiotherapists and how these habits can be improved (9).

Nutrition and physical activity are the foundation of a healthy life, and their balance is essential for maintaining physical and mental health (10). In modern

society, which faces challenges such as rapid urbanization and the availability of processed foods, many people are overweight while at the same time suffering from malnutrition in terms of nutrients (11). In addition, a fast-paced lifestyle and reduced physical activity have become common problems that further worsen the condition (12). According to the World Health Organization, lack of physical activity and unhealthy diet are major risk factors for many chronic diseases, including cardiovascular diseases, type 2 diabetes, and cancer (13). Physiotherapists play a key role in promoting physical activity and health, and their role in educating patients about the importance of proper nutrition and physical activity can significantly contribute to the prevention of these diseases (14). Healthy eating models, such as the Food Guide Pyramid and the Healthy Eating Plate, provide guidelines for a balanced diet (15, 16). The pyramid arranges foods in order of importance, with vegetables, fruit, and whole grains forming the base, while dairy products, fish, eggs, and lean meat are consumed in moderation (15). Processed foods and red meat are at the top and are recommended to be consumed in moderation. The Healthy Eating Plate emphasizes a practical approach to meals: half of the plate should be filled with vegetables and fruit, while the other half contains whole grains and protein sources (16). It is recommended to drink water instead of sugary drinks and to use healthy fats, such as olive oil.

Physiotherapists, as experts dealing with functional movement and rehabilitation, should promote health and good lifestyle habits (17). Although physiotherapists are not nutritionists and cannot create diet therapy plans, they play an important role

in educating patients about the basics of healthy eating, which can positively influence the success of rehabilitation processes (18). Given that proper nutrition can directly affect various aspects of rehabilitation, including speed of recovery and reduction of risk of complications, physical therapists must be aware of the importance of this component of health (19). Despite their knowledge and skills in rehabilitation and physical therapy, physical therapists often do not apply the same principles in their own lives, which can have negative consequences on their ability to optimally perform their profession. Understanding the factors that shape dietary habits, as well as implementing strategies to promote healthy lifestyle habits among physical therapists (18, 19), is essential for improving general health, professional performance, and quality of patient care. Through education, support, and adaptation of working conditions, physiotherapists can become key actors in prevention, which has long-term benefits for the community and the healthcare system (19, 20).

AIM

The aim of this study is to systematically investigate the dietary habits of physiotherapists, with particular attention to their typical food patterns.

MATERIALS AND METHODS

The study was conducted from June to October 2024 at the Faculty of Health Studies, University of Mostar. A total of 100 physiotherapists participated in the study. The inclusion criteria in the study included physiotherapists with at least a completed undergraduate degree in physiotherapy and their voluntary decision to participate in the study. The exclusion

criteria were incomplete questionnaires or incomplete data, which ensured the quality and validity of the collected data.

The study was conducted via a survey using the Google Forms platform. The survey questionnaire referred to questions related to the dietary habits of physiotherapists. Dietary habits questionnaire - An adapted Food Frequency Questionnaire (FFQ) was used, which was based on the Spanish dietary questionnaire, but was adapted for the specific dietary habits of the local population and translated into Croatian. The questionnaire included questions about the frequency of consumption of different types of foods, including fruits, vegetables, meat, sweets, dairy products and cereals. Specific questions were also included regarding the preferences of certain foods among physiotherapists (21).

Respondents were sent a link to an online survey that was created via the Google Forms platform via their official e-mail addresses, collected through groups of physiotherapists on social networks. Respondents were informed about the aim of the research, and participation in the survey was voluntary and anonymous. At the beginning of the survey, the participants were informed about the purpose of the research and gave their consent to participate. The data was automatically collected through the Google Forms platform and then exported to Excel format for further processing and analysis. The research was approved by the Ethics Committee of the Faculty of Health Studies, University of Mostar.

The normality of the distribution of the results on the variables was examined using the Kolmogorov-Smirnov test. Descriptive statistics presented the results through the arithmetic mean (for a normal

distribution) and standard deviation or median and semi-interquartile scatter in the case of a distribution that deviates from normal. The Chi-square test and the Mann-Whitney U test were used to examine differences between groups, while the significance level was set at $p < 0.05$.

RESULTS

The tested sample consists of 100 physiotherapists, of whom there are significantly more female respondents (73%) compared to men, of whom only 27% are in the sample ($X^2 = 21.160$, $df = 1$, $p < 0.001$). The youngest respondent was 21 years old, the oldest 35, while the average age of the respondents, expressed over the median, was 24 years ($Q = 3$) in Table 1.

Table 1. Demographic and Statistical Data of Respondents

Data	Value
Total number of respondents	100
Number of female respondents	73% (73 female)
Number of male respondents	27% (27 male)
Statistical test (X^2)	21.160
Degrees of freedom (df)	1
P-value	< 0.001
Youngest respondent	21 years old
Oldest respondent	35 years old
Average age (median)	24 years old
Interquartile range (Q)	3

The basic descriptive parameters for height, weight, and BMI are shown in Table 2. The minimum body weight of the subjects was 49 kg, while the heaviest subject weighed 120 kg. The average Body Mass Index (BMI) was 24.072, which is the upper average of the recommended BMI, but still within the recommended limits according to the WHO classification, and the maximum was a high 39.18. The average weight of men was 89.5 kg, while for women it was 66.4 kg. The minimum

BMI for men in this study was 22.16, which means that there is not a single man with a below-average BMI, or underweight, while the average is slightly higher at 26.419, which belongs to the category of overweight, or excessive body weight. An analysis of women's minimum BMI shows that the lowest (16.91) was recorded in the malnutrition category, but that the average BMI of women belongs to the normal body weight category.

Table 2. Descriptive parameters for height, weight and BMI of physiotherapists (N=100)

	All participants				Male participants			Female participants				
	Min	Max	M	Sd	Min	Max	M	Sd	Min	Max	M	Sd
Body height (cm)	155	197	173,1	9,085	163	197	183,89	6,88	155	182	169,11	6,05
Body weight (kg)	49	120	72,636	15,72	61,1	118	89,503	11,379	49	120	66,397	12,12
BMI	16,91	39,18	24,072	3,843	22,16	30,68	26,419	2,592	16,91	39,18	23,204	3,879

Using the Chi-square test, it was determined that there are significantly more physiotherapists who consume breakfast (79%), lunch (95%), and dinner (84%) compared to those who do not, with the analysis of percentages showing that the lowest proportion of those who

consume breakfast every day is those who eat lunch every day, i.e., do not skip lunch. Statistically significantly more physiotherapists consume snacks compared to those who do not, while there are no differences in the frequency of use of dietary supplements (Table 3).

Table 3. *Distribution of physiotherapists with regard to meal consumption (N = 100)*

		Yes	No	X ²	df	p
		f (%)	f (%)			
Meal	Breakfast	79 (79 %)	21 (21 %)	33,640	1	< 0,001
	Lunch	95 (95 %)	5 (5 %)	81	1	< 0,001
	Dinner	84 (84 %)	16 (16 %)	46,24	1	< 0,001
	Snack	61 (61 %)	39 (39 %)	4,84	1	0,028
	Dietary supplements (vitamins, multivitamins, probiotics, sports nutrition)	43 (43 %)	57 (57 %)	1,96	1	0,162

No statistically significant differences were found in the habits of adding salt to already prepared food according to gender ($X^2 = 0.036$, $df = 1$, $p = 0.849$) and in adding

sugar between male and female physiotherapists ($X^2 = 0.461$, $df = 1$, $p = 0.497$, Table 4).

Table 4. *Frequency of adding salt and sugar to food/beverages*

Consumption habits	Males participants			Females participants			All participants		
	X ²	df	p	X ²	df	p	X ²	df	p
Putting salt in food	0,036	1	0,849	0,036	1	0,849	0,64	1	0,424
Putting sugar in drinks	0,461	1	0,497	0,461	1	0,497	4,84	1	0,028

An equal proportion of respondents added and did not add salt to already prepared food ($X^2 = 0.64$, $df = 1$, $p = 0.424$), but it was found that in the case of sugar, the proportion of respondents who added sugar to drinks was statistically significantly higher than that of those who did not ($X^2 = 4.84$, $df = 1$, $p = 0.028$).

Considering smoking habits, the most represented physiotherapists in the study were non-smokers (78%), compared to a statistically significantly lower proportion

of those who smoked, which was 22% ($X^2 = 213.2$, $df = 4$, $p < 0.001$). Among respondents who were smokers, the least, or only 2%, were those who smoked 20 or more cigarettes per day. No statistically significant gender difference was found in smoking habits ($X^2 = 1.893$, $df = 3$, $p = 0.64$); that is, male and female physiotherapists in this study do not differ significantly in terms of smoking habits (Table 5).

Table 5. Distribution of physiotherapists according to smoking habits ($N = 100$)

Data	Value
Total number of respondents	100
Percentage of non-smokers	78
Percentage of smokers	22
Percentage of smokers who smoke 20 or more cigarettes per day	2
Statistical test (X^2)	213.2
Degrees of freedom	4
P-value (smokers vs non-smokers)	<0.001
Statistical significance of gender differences in smoking habits	No significant difference ($X^2 = 1,893$)
P-value (gender and smoking habits)	0.64

The analysis of dietary habits of physiotherapists in Table 6 showed that there are no significant gender differences in the consumption of most foods ($p > 0.05$), except for marmalade/jam ($p =$

0.004) and beer ($p = 0.002$). Men and women equally often consume bread, snacks, sweets, and fast food, while men drink more beer.

Table 6. Combined table of consumption of different foods

Category	Foodstuff	1-3 times a week		4-6 times a week		1 time every day		Multiple times a day		X^2	p
		M	F	M	F	M	F	M	F		
Bread and bakery products	Croissant, doughnut, bakery product	15	55	5	11	2	2	0	2	8,178	0,085
	Wholemeal bread, wholemeal pastries	15	37	3	16	2	9	1	2	3,083	0,544
	Muesli, cereal flakes	14	44	4	11	4	7	0	2	2,01	0,745
	White bread	18	42	7	15	5	10	2	5	5,632	0,228
Salty snacks	Chips, snacks, popcorn	18	52	2	10	2	5	0	1	3,701	0,459
Sweets	Chocolate, chocolate cookies	11	39	8	19	2	6	1	5	4,466	0,345
	Pastries	14	46	7	15	2	4	0	2	2,43	0,675
	Marmalade or jam	15	61	4	3	4	1	0	3	13,226	0,004
Fast food	Burgers	17	52	4	8	2	4	1	0	3,318	0,526
	Pizza	14	54	5	10	1	3	1	1	6,836	0,109
Alcohol	Beer	12	56	9	5	2	2	0	0	13,068	0,002
	Wine	16	56	4	5	3	2	0	0	5,065	0,15
	Liquor, spirits	18	53	2	8	2	1	0	0	2,828	0,431

Analysis of physiotherapists' dietary habits showed that there were no statistically significant gender differences in the consumption of most foods ($p > 0.05$), except for fruit juices ($p = 0.015$). Intake of

dairy products, meat, fish, vegetables, and nuts was similar between the sexes, while men consumed fruit juices slightly more often (Table 7).

Table 7. Combined table of dietary habits of physiotherapists

Category	Foodstuff	1-3 times a week		4-6 times a week		1 time every day		Multiple times a day		X ²	P
		M	F	M	F	M	F	M	F		
Milk and dairy products	Yogurt and similar products	7	25	12	26	3	14	0	2	3,736	0,419
	Butter or margarine spread	13	50	6	11	2	4	0	2	5,970	0,191
	Milk, cocoa, white coffee	9	28	3	14	9	19	2	9	4,512	0,336
Meat, meat products and eggs	Fried/boiled egg	11	29	11	21	4	15	1	6	1,947	0,747
	Beef, roasted pork	14	50	6	14	6	5	0	2	5,634	0,188
Bluefish and tuna	Fried or baked blue fish	16	52	5	9	2	4	0	1	2,462	0,726
	Tuna and tuna dishes	17	45	2	17	4	2	0	1	7,645	0,075
Vegetables	Boiled potatoes, mashed	16	40	4	23	3	6	1	1	5,067	0,249
	Fried/baked potatoes	14	46	6	19	3	4	1	1	4,206	0,34
	Salad, green leafy vegetables	13	31	6	22	2	12	3	2	4,501	0,336
Fruits	Apple, pear, banana	10	27	7	21	3	17	2	4	5,176	0,253
	Orange, tangerine	15	28	3	17	3	6	0	3	3,703	0,432
Nuts	Almonds, hazelnuts, walnuts	12	37	4	17	4	6	1	6	4,455	0,346
	Peanuts, pistachios	13	45	4	11	2	7	2	3	3,77	0,437
Cooked dishes	Soup (meat or vegetable)	14	34	6	29	4	7	0	1	5,535	0,205
	Risotto with meat	17	44	2	14	3	5	0	2	3,576	0,46
Soft drinks	Carbonated drinks, Coca-Cola, Fanta	14	48	6	13	2	6	0	1	3,98	0,416
	Coffee	4	20	8	12	9	24	2	14	7,95	0,093
	Fruit juice (purchased or squeezed fruit)	10	44	8	20	2	6	2	0	10,99	0,015

DISCUSSION

Physiotherapists' dietary habits have a significant impact on their health and professional performance, as they are role models for their patients as health professionals. The results of the study show that 65% of the respondents have a normal body weight, while 2% are underweight, 23% are overweight, and 10% are obese. The statistically significant difference in body mass index (BMI) between men and women confirms the known trend that men, due to their specific body structure and fat distribution, tend to have a higher BMI (17). These data indicate the need for targeted interventions to reduce the proportion of overweight and undernourished individuals, especially in the context of the global obesity epidemic. According to the World Health Organization (WHO) guidelines, the recommended daily salt intake should not exceed 5 g (22). The results of the study show that an equal number of respondents add and do not add salt to ready-made

food, while in the case of sugar, a significantly higher proportion of respondents add it to drinks. These data are comparable to the findings of similar studies conducted on healthcare workers, where 24.8% of respondents stated that they never add salt to ready-made food, 56.9% do so only when it is not salty enough, while 20% of respondents add it almost always (23). Analyzing the frequency of consumption of bread, bakery products, cereals and processed foods during a week, no difference was observed between the sexes, except for the consumption of cereals. Namely, 38.1% of male physiotherapists consume this food four to six times a week, while only 12.5% of female respondents do the same. This difference may be related to the greater involvement of male physiotherapists in sports activities that require quick energy sources (18, 19). Furthermore, healthcare professionals consume white bread more often than wholemeal bread, which has been confirmed in other studies conducted

in this region (24, 25). For example, a study conducted in Serbia showed that white bread was the most frequently consumed food by 55% of respondents, and it was additionally found that the level of education did not influence the choice of nutritionally better types of bread (25).

The recommendation for fruit and vegetable consumption is at least five servings per day, with the aim of ensuring an adequate intake of vitamins and minerals necessary for proper body function (5, 13). In contrast, the results of this study indicate a significantly lower consumption of fruit and vegetables among physiotherapists ($p < 0.001$), which is not in line with the recommended guidelines. Previous studies have shown that entry into higher education often leads to changes in dietary habits, including a decrease in fruit and vegetable intake (26, 27), which may have long-term consequences on dietary patterns in adulthood. However, the results of the study indicate that the subjects consume bananas in larger quantities than recommended, while the intake of green leafy vegetables is inadequate, regardless of gender.

Meat is an important source of high-quality protein, vitamin B12, and iron, which are essential for muscle growth, energy maintenance, and nervous system function. Research results indicate that men consume chicken, turkey, ham, salami, and sausages significantly more often than women ($p < 0.001$), with the amounts consumed often exceeding the recommended values, while similar studies have shown insufficient intake of meat and fish (5). Furthermore, fish and tuna intake is similar between genders, but the majority of respondents consume less than the recommended amount, thereby reducing the intake of omega-3 fatty acids

that are essential for cardiovascular health (28). Intake of milk and dairy products, which are essential for osteoporosis prevention, also varies among respondents and is often not in line with the recommended values. Previous studies have shown that yogurt consumption can improve the quality of life of healthcare workers by positively affecting sleep and gastrointestinal health, which may contribute to their professional effectiveness (29, 30). Furthermore, the study shows that the diet of physiotherapists is not sufficiently represented by cooked food ($p < 0.001$), while the consumption of snacks is more frequent but in smaller quantities, similar to the results of other studies with healthcare professionals (24, 25). Analyzing alcohol consumption habits, previous studies conducted on the student population showed that 97.4% of women and 86.7% of men consume alcohol (31). The results of this study indicate that male physiotherapists consume beer more often and in larger quantities than recommended, while the total amounts of alcohol consumed by most respondents are lower than recommended values ($p < 0.001$). Although this can be considered positive, it is important to emphasize that the frequency and amount of alcohol consumption can pose a significant health risk. It was also shown that 78% of respondents do not smoke, which is in line with the results of studies conducted on healthcare professionals in the USA (2%), Australia (3%), and England (3%) (32).

Based on the overall results of the study, which indicate inadequate consumption of fruits, vegetables and fish, it can be concluded that there is a need for additional education of physiotherapists on proper nutrition. These results are in line

with previous research conducted on physiotherapy students, who did not meet the principles of healthy eating according to the guidelines and highlighted the need to increase nutritional awareness in order to encourage the adoption of healthier eating habits (33). Although some positive aspects of nutrition, such as more frequent consumption of cooked meals and sufficient water intake, indicate awareness of a healthy lifestyle, it is necessary to emphasize the limitations of the study, primarily the small sample of respondents, which may affect the generalizability of the results. Also, the survey method may be subject to subjective bias of the respondents. Future research should focus on evaluating the impact of educational programs aimed at improving the nutritional and physical habits of physiotherapists and examining the impact of such interventions on professional effectiveness.

CONCLUSION

The study showed that the dietary habits of physiotherapists are not fully aligned with the recommended dietary guidelines. Although the majority of respondents regularly consume main meals, the intake of fruits, vegetables, and fish remains below optimal levels, which may have long-term implications for their health and professional performance. The results show gender differences in dietary patterns, with men consuming more processed meat and beer, while women prefer dairy products and whole meal bread. Given the key role of proper nutrition in the prevention of chronic diseases and maintaining optimal physical fitness, it is necessary to implement targeted educational programs to improve nutritional awareness and practice among

physiotherapists. Future research should focus on evaluating the effectiveness of nutritional education and developing strategies for implementing healthier eating habits in this professional group.

LITERATURE

1. Cao C, Xiao Z, Wu Y, Ge C. Diet and Skin Aging-From the Perspective of Food Nutrition. *Nutrients*. 2020;12(3):870. doi: 10.3390/nu12030870.
2. Huse O, Schultz S, Boelsen-Robinson T, Ananthapavan J, Peeters A, Sacks G, et al. The implementation and effectiveness of outlet-level healthy food and beverage accreditation schemes: A systematic review. *Obes Rev*. 2023;24(4):13556. doi: 10.1111/obr.13556.
3. Milanović Z, Sporiš G, Trajković N, Vračan D, Andrijašević M, Pantelić S, et al. Attitudes towards exercise and the physical exercise habits of University of Zagreb students. *Annales Kinesiologiae*. 2013;4(1):57-70.
4. Babić M. U zdravom tijelu zdrav duh: tjelovježbom do boljeg zdravlja. *Zdravstveni glasnik*. 2022;8(1):84-93. doi: 10.47960/2303-8616.2022.15.84.
5. Salibašić A. Prehrambene navike fizioterapeuta (doctoral thesis). University of Rijeka. Faculty of Health Studies. Available at: <https://urn.nsk.hr/urn:nbn:hr:184:944691>.
6. Stollar E, Smith D. Uncovering protein structure. *Essays Biochem*. 2020;64(4):649-680.
7. Poole R, Kennedy O, Roderick J, Fallowfield P, Hayes J, Parkes J. Coffee consumption and health: umbrella review of meta-analyses of multiple health outcomes. *British Medical Journal*. 2017;359:5024.
8. Kgokong D, Parker R. Physical activity in physiotherapy students: Levels of

- physical activity and perceived benefits and barriers to exercise. *S Afr J Physiother*. 2020;76(1):1399. doi: 10.4102/sajp.v76i1.1399.
9. Morris DM, Kitchin EM, Clark DE. Strategies for optimizing nutrition and weight reduction in physical therapy practice: the evidence. *Physiother Theory Pract*. 2009;25(5-6):408-23. doi: 10.1080/0959398090283536.
10. Netzer R, Elboim-Gabyzon M. Attitudes toward the integration of nutritional assessment and counseling in the framework of physical therapy: a cross-sectional survey. *BMC Med Educ*. 2023;23(1):802. doi: 10.1186/s12909-023-04706-2.
11. Vukić I, Pravdić D. Važnost pravilne prehrane osoba oboljelih od šećerne bolesti. *Zdravstveni glasnik*. 2020;6(1):72-82. doi: 10.47960/2303-8616.2020.11.71.
12. Jakicic J, Kraus W, Powell K, Campbell W, Janz K, Troiano R, et al. Association between bout duration of physical activity and health: systematic review. *Med Sci Sports Exerc*. 2019;51(6):1213-9.
13. World Health Organization. Global atlas on cardiovascular disease prevention and control. Geneva: World Health Organization; 2011.
14. Jones CA, Forhan M. Addressing weight bias and stigma of obesity amongst physiotherapists. *Physiother Theory Pract*. 2021;37(7):808-816. doi: 10.1080/09593985.2019.1648623.
15. Mandić ML. Znanost o prehrani : hrana i prehrana u čuvanju zdravlja. [Internet]. Osijek: Prehrambeno tehnološki fakultet Osijek; 2004, [13.03.2025.] Available at: <https://urn.nsk.hr/urn:nbn:hr:109:175217>.
16. Verbanac D, Maleš Ž, Barišić K. Nutrition - facts and myths. *Acta Pharm*. 2019;69(4):497-510.
17. Lee DH, Keum N, Hu FB, Orav EJ, Rimm EB, Willett WC, Giovannucci EL. Predicted lean body mass, fat mass, and all cause and cause specific mortality in men: prospective US cohort study. *BMJ*. 2018;362:k2575. doi: 10.1136/bmj.k2575.
18. Rahmati-Najarkolaei F, Talatappeh H, Naghavi S. Physical activity and nutrition status in the university students: A mixed method study. *J Health Policy Sustainable Health*. 2015;2(2):201-206.
19. Kgokong D, Parker R. Physical activity in physiotherapy students: Levels of physical activity and perceived benefits and barriers to exercise. *S Afr J Physiother*. 2020;76(1):1399.
20. Schramlová M, Řasová K, Jonsdottir J, Pavlíková M, Rambousková J, Äijö M, et al. Quality of life and quality of education among physiotherapy students in Europe. *Front Med*. 2024;19(11):1344028.
21. Food Frequency Questionnaire [Internet]. Bethesda (MD): National Heart, Lung, and Blood Institute; 2018 [cited 2025 Mar 28]. Available from: <https://biolincc.nhlbi.nih.gov/frameoffspring/forms/>
22. Guthold R, Stevens GA, Riley LM, Bull FC. Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1·9 million participants. *Lancet Glob Health*. 2018;6(10):e1077-e1086. doi: 10.1016/S2214-109X(18)30357-7.
23. Kwong EJJ, Whiting S, Bunge AC, Leven Y, Breda J, Rakovac I et al. Population-level salt intake in the WHO European Region in 2022: a systematic review. *Public Health Nutr*. 2023;26(S1):s6-s19. doi: 10.1017/S136898002200218X.
24. Magdelinić G, Magdelinić M, Marinović N, Živanović S, Ilić B. Dietary

habits among healthcare and education workers. *Pons Med*. 2019;16(1):19-23.

25. Šereš Z, Šoronja D, Grujičić M, Maravić N, Kiš F, Dokić LJ, et al. Bread as an indicator of changing dietary habits among young people. *Hrana u zdravlju i bolesti*, scientific-professional journal for nutrition and dietetics. 2017;6(2):48-89.

26. Hootman KC, Guertin KA, Cassano PA PhD. Longitudinal changes in anthropometry and body composition in university freshmen. *J Am Coll Health*. 2017;65(4):268-276. doi: 10.1080/07448481.2017.1280498.

27. Deforche B, Van Dyck D, Deliens T, De Bourdeaudhuij I. Changes in weight, physical activity, sedentary behaviour and dietary intake during the transition to higher education: a prospective study. *Int J Behav Nutr Phys Act*. 2015;12:16. doi: 10.1186/s12966-015-0173-9.

28. Hu Y, Hu FB, Manson JE. Marine Omega-3 Supplementation and Cardiovascular Disease: An Updated Meta-Analysis of 13 Randomized Controlled Trials Involving 127 477 Participants. *J Am Heart Assoc*. 2019;8(19):e013543. doi: 10.1161/JAHA.119.013543.

29. Ratajczak AE, Zawada A, Rychter AM, Dobrowolska A, Krela-Kaźmierczak I. Milk and Dairy Products: Good or Bad

for Human Bone? Practical Dietary Recommendations for the Prevention and Management of Osteoporosis. *Nutrients*. 2021;13(4):1329. doi:

10.3390/nu13041329.

30. Kinoshita T, Maruyama K, Suyama K, Nishijima M, Akamatsu K, Jogamoto A, Katakami K, Saito I. Consumption of OLL1073R-1 yogurt improves psychological quality of life in women healthcare workers: secondary analysis of a randomized controlled trial. *BMC Gastroenterol*. 2021;21(1):237. doi: 10.1186/s12876-021-01793-7.

31. Giacometti J, Buretić Tomljanović A. Prevalence of dyslipidemia in the student population of the University of Rijeka. *Medicina Fluminensis*. 2013;49(2):184-192.

32. Smith DR, Leggat PA. An international review of tobacco smoking in the medical profession: 1974-2004. *BMC Public Health*. 2007;7:115. doi: 10.1186/1471-2458-7-115.

33. Szypowska A, Jeziorek M, Regulska-Illow B. Assessment of eating and lifestyle habits among Polish cosmetology and physiotherapy students. *Rocz Panstw Zakl Hig*. 2020;71(2):157-163. doi: 10.32394/rpzh.2020.0111.

PREHRAMBENE NAVIKE FIZIOTERAPEUTA

Vedrana Grbavac^{1,2}, Marija Mandić¹, Marija Govorko³, Vinka Lučić⁴, Nikolina Slišković¹

¹Fakultet zdravstvenih studija, Sveučilište u Mostaru, Mostar, Bosna i Hercegovina

²Sveučilišna klinička bolnica Mostar, 88 000 Mostar, Bosna i Hercegovina

³Studij kliničko sestrinstvo, Sveučilište u Dubrovniku, 20 000 Dubrovnik, Hrvatska

⁴Sveučilišni odjel zdravstvenih studija, Sveučilište u Splitu, 21 000 Split, Hrvatska

SAŽETAK

Uvod: Prehrambene navike, pod utjecajem regionalnih, kulturoloških i čimbenika stila života, ključne su u održavanju tjelesnog i mentalnog zdravlja. Zdrava prehrana često je izazov u modernom društvu, u kojem prevladavaju sjedilački način života i konzumacija prerađene hrane. Fizioterapeuti, kao zdravstveni djelatnici, trebali bi biti primjer u usvajanju i promicanju zdravih prehrambenih navika. Međutim, istraživanja pokazuju da se ne pridržavaju uvijek preporučenih prehrambenih smjernica, što može utjecati na njihovo zdravlje i profesionalnu izvedbu.

Cilj: Analizirati prehrambene navike fizioterapeuta i njihov utjecaj na zdravlje i profesionalnu učinkovitost.

Ispitanici i metode: Na Fakultetu zdravstvenih studija Sveučilišta u Mostaru provedeno je presječno istraživanje u kojem su sudjelovali fizioterapeuti s najmanje završenim preddiplomskim studijem. Podaci su prikupljeni putem anonimne ankete pomoću modificiranog Upitnika o učestalosti konzumiranja hrane (FFQ). Ispitana je učestalost konzumacije hrane, unos šećera i soli te navike vezane uz brzu hranu, grickalice i konzumaciju alkohola.

Rezultati: Većina fizioterapeuta redovito doručkuje (79%), ruča (95%) i večera (84%), dok 61% ima međuobroke. Značajan broj ispitanika dodaje šećer u pića, a unos soli nema razlike prema spolu. Konzumacija voća i povrća bila je ispod preporučenih razina, ali su se preferirala kuhana jela i unos vode je bio dovoljan. Muški sudionici konzumirali su više piva, a 22% ispitanika čine pušači.

Zaključak: Iako fizioterapeuti pokazuju svijest o zdravoj prehrani, potrebna su poboljšanja, posebice u povećanju unosa voća, povrća i ribe. Obrazovanje o prehrani moglo bi poboljšati njihovo cjelokupno zdravlje i profesionalnu učinkovitost.

Ključne riječi: prehrambene navike, zdrava prehrana, fizioterapeuti

Autor za korespondenciju: Marija Mandić, magistrica fizikalne terapije;

marija.mandic@fzs.sum.ba