



HEALTH STATUS AND HEALTH CULTURE OF STUDENTS STUDYING UNDER THE ERASMUS+ PROGRAM

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ABSTRACT

Through a survey conducted among students participating in Erasmus+ program training, we aimed to examine their opinions regarding their health status and health culture.

Our main objectives were:

1) Development of a survey questionnaire; 2) Conducting the survey on the examined issue, processing, and analysing the results; 3) Summarizing the results.

The study was conducted during the winter semester of the 2022/2023 academic year, in the period from September 11 to September 15, 2023, at the University of Social and Medical Sciences in Lublin, Poland. A total of 21 students from six different countries and universities participated, with an average age of 25 years.

The students were surveyed anonymously using a questionnaire that included questions about their health status (3 questions), health culture (10 questions), and economic factors influencing physical activity (2 questions). The results were analyzed using alternative and graphical analysis methods.

The survey highlights the need for joint efforts between universities and students to promote physical activity, healthy nutrition, and the maintenance of good mental health.

Keywords: survey study, sports, healthy nutrition, harmful habits, students

INTRODUCTION

Physical education and sports carry a vital responsibility in counteracting the decline in motor activity within society by employing a wide range of tools, methods, and forms. They also play a key role in mitigating the negative psycho-emotional effects of contemporary lifestyles (1, 2). At the university level, numerous studies investigate students' physical fitness, motor activity, and lifestyle habits. M. Ivanova and P. Petkov analyse the effects of innovative methods aimed at developing the physical qualities of strength and endurance among students (3). As sports professionals, our role is to create conditions that stimulate students' interest, involvement, and appreciation for sports-factors which can later develop into conscious, self-motivated behaviours and sustainable healthy lifestyles throughout their academic and professional lives. Within the Erasmus+ program, we focus on designing presentations and practical

sessions that highlight the educational, cultural, pedagogical, and socio-communicative functions of physical education and sports, their restorative potential, and the role of harmful habits in contributing to socially significant diseases, emphasizing the importance of preventive measures.

Introducing and integrating innovations into the teaching of the "Sport" discipline is essential (4, 5). This includes non-traditional sports (6-8), motor activities adapted for students with health conditions (9, 10), and professionally oriented physical training tailored to students' academic specializations (11). Sport promotes values that are integral to the educational system (12-15).

Balanced nutrition plays a decisive role in supporting the body's proper functioning during periods of intense mental workload and stress associated with university studies (16, 17). All unhealthy habits have been shown to produce adverse long-term effects (18).

METHODOLOGY

Students participating in the Erasmus+ training program come from countries with varying levels of economic development, political

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goals, and historical and cultural values. Their academic specializations are primarily within the fields of medicine, social sciences, and finance. The primary age group of Erasmus+ participants is between 20 and 23 years old, which is typical for university exchange programs. The lower representation of older participants indicates the program is predominantly aimed at young people, although it still attracts some more mature students. First-year students and those in master's programs also participate but in smaller numbers, likely due to differing academic priorities or readiness for mobility at the beginning or end of their studies. Most Erasmus+ participants are second- to fourth-year students, which aligns with the optimal period for exchange.

The objective of our study was to investigate the opinions of students involved in the Erasmus+ program regarding their health status and health culture.

Main tasks:

1. Develop a survey questionnaire addressing the studied issue.
2. Conduct the survey, process, and analyse the results.
3. Summarize the findings.

Organization and Methodology

The study was conducted during the winter semester of the 2022/2023 academic year, between September 11 and 15, 2023, at the University of Social and Medical Sciences in Lublin, Poland. A total of 21 students from six different countries and universities participated, with an average age of 25 years.

Students completed an anonymous survey that included questions on health status (3 questions), health culture (10 questions), and economic factors influencing participation in sports (2 questions). The data were processed using methods of alternative and graphical analysis.

RESULTS AND ANALYSIS

In response to the first question, “Do you have any health problems that you know of?”, 43% of students reported no health issues. The remaining participants reported various conditions, including pulmonary diseases (10%), vision problems (10%), gynaecological issues (9%), musculoskeletal disorders (10%), cardiovascular conditions (5%), and other unspecified illnesses (14%) (**Figure 1**).

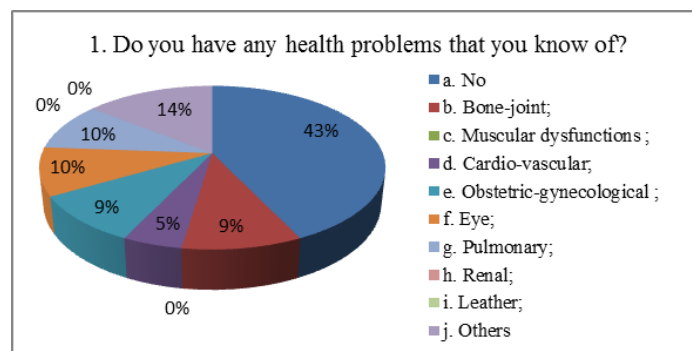


Figure 1. Answers to question №1: „Do you have any health problems that you know of?“

Regarding the second question, “Have you ever been injured while playing sports?”, 67% of the respondents answered “No,” while 33%

reported having sustained a sports-related injury (**Figure 2**).

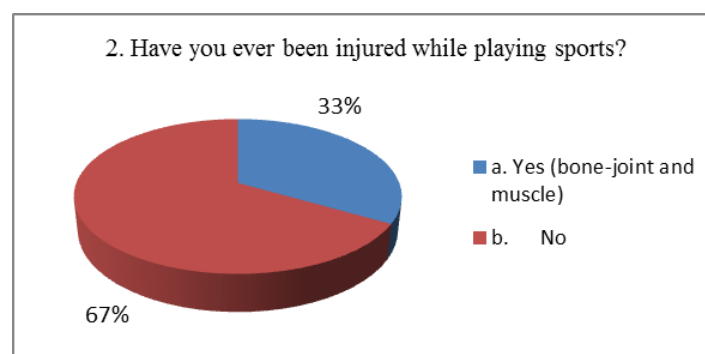


Figure 2. Answers to question №2: „Have you ever been injured while playing sports?“

As shown in **Figure 3**, in response to “How do you rate your health?”, 48% of students evaluated their health as good, 43% as very

good, and only 9% considered themselves to be in excellent health.

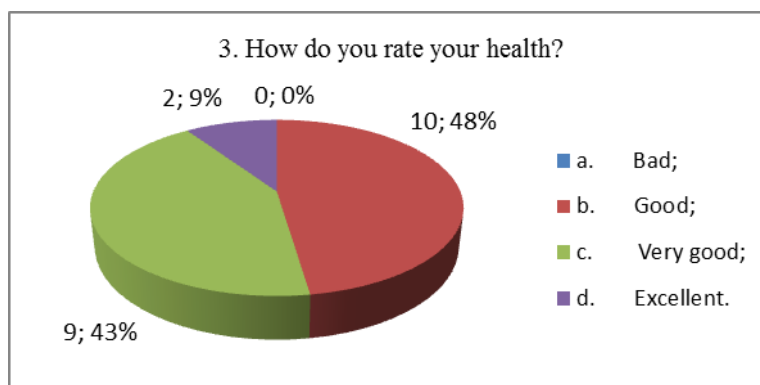


Figure 3. Answers to question №3: „How do you rate your health? “

Figure 4 illustrates how often students eat healthy and balanced meals. The largest proportion (38%) indicated that they eat healthily very often, followed by 24% who

answered “often,” and 10% who responded “always.” On the other hand, 19% selected “not often,” and 9% admitted that they do not eat healthily.

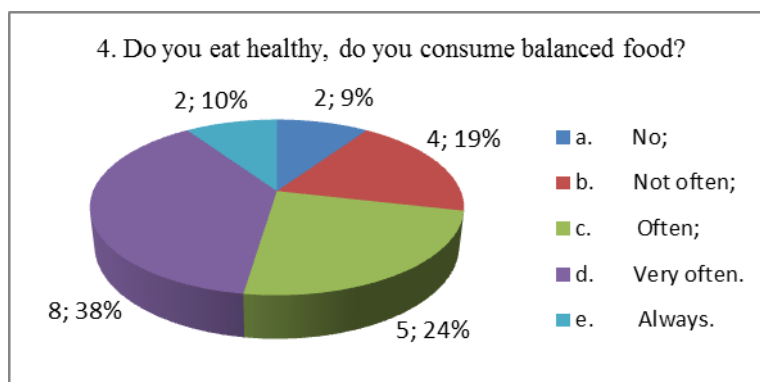


Figure 4. Answers to question №4: „Do you eat healthy, do you consume balanced food?“

When asked, “Do you include fresh fruits and vegetables every day?”, 43% of students answered “often,” and another 43% answered

“very often.” However, only 14% stated that they always include fruits and vegetables in their daily diet (**Figure 5**).

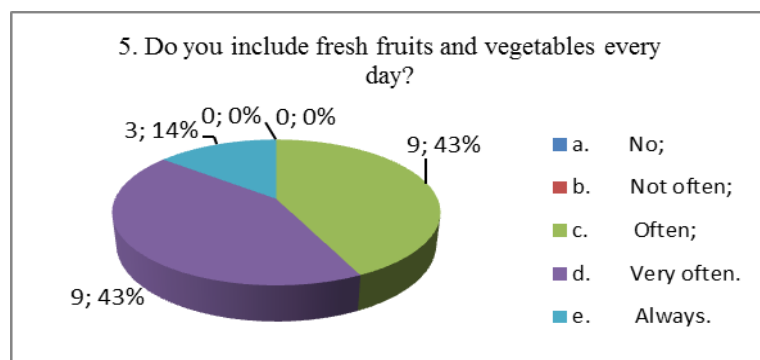


Figure 5. Answers to question №5: „Do you include fresh fruits and vegetables every day? “

Figure 6 displays the responses to “Do you consume fish, meat, and meat products at least twice a week?”. A majority (71%) confirmed regular consumption of these products, while 10% stated that they do not always consume

them, and another 10% reported not consuming them at all. Only 9% categorically denied consuming fish, meat, and meat products twice a week.

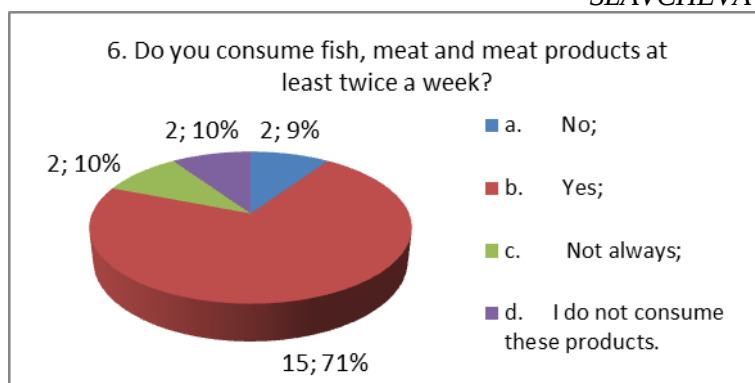


Figure 6. Answers to question №6: „Do you consume fish, meat and meat products at least twice a week? “

The results in **Figure 7** present a breakdown of harmful habits among students. The highest percentage (26%) reported having no harmful habits. Equal proportions (16%) identified low or absent physical activity and irregular nutrition. Smoking was reported by 13%, while

alcohol consumption and use of coffee or energy drinks were each selected by 10%. The least reported habits were insomnia (6%), overeating (3%), and drug use (0%). Notably, 13 students indicated more than one harmful habit.

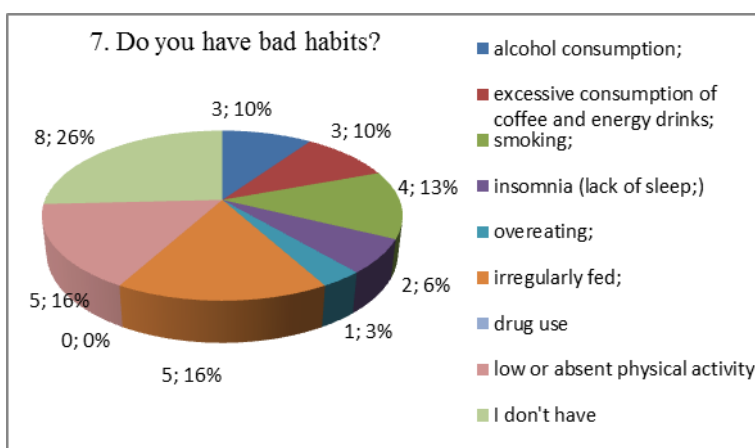


Figure 7. Answers to question №7: „Do you have bad habits? (You can indicate more than one answer) “

Figure 8 displays students' responses to “What physical activity have you had so far?”. Three categories emerged: 38% reported minimal

physical activity, 48% indicated regular activity, and 14% engaged in highly regular physical activity.

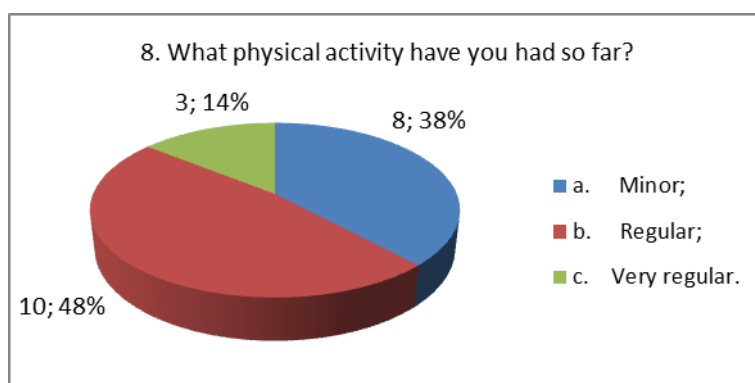


Figure 8. Answers to question №8: „What physical activity have you had so far? “

The next question asked was: “Do you believe that physical activity can improve your health status?” **Figure 9** presents the results, which indicate that 95% of the respondents believe

that physical activity can enhance their health condition. Only 5% of the participants were unable to determine whether physical activity has a positive effect on their health status.

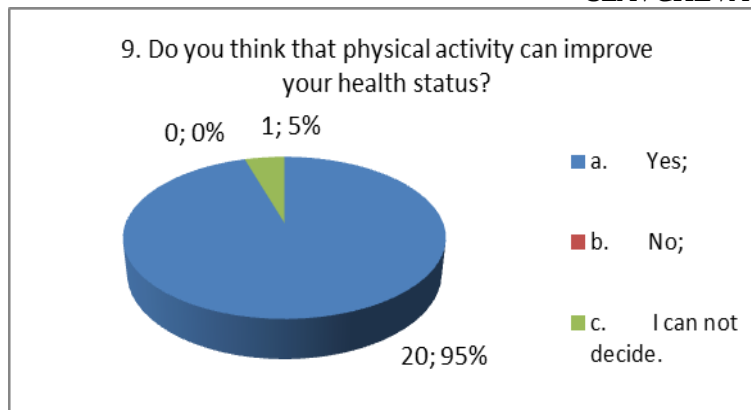


Figure 9. Answers to question №9: „Do you think that physical activity can improve your health status? “

Figure 10 shows how frequently students wish to engage in physical exercises and sports. A large share (48%) selected more than twice a

week, 24% chose twice a week, while 14% wished to exercise once a week or not at all.

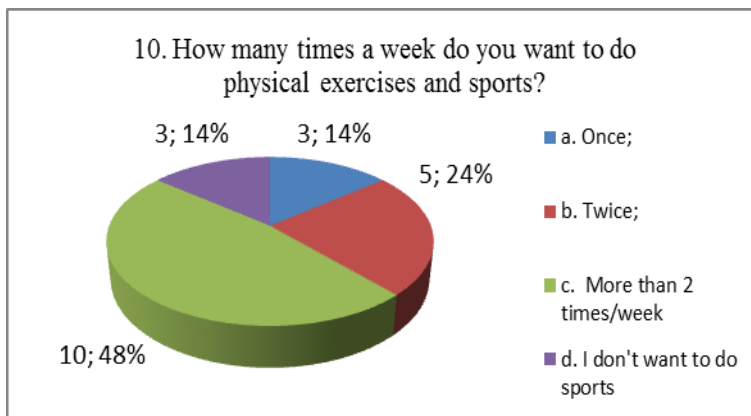


Figure 10. Answers to question №10: „How many times a week do you want to do physical exercises and sports? “

As for the question “Do you take vitamins and nutritional supplements?”, 48% responded affirmatively, 43% reported irregular intake or

usage during specific conditions, and 9% do not take any (**Figure 11**).

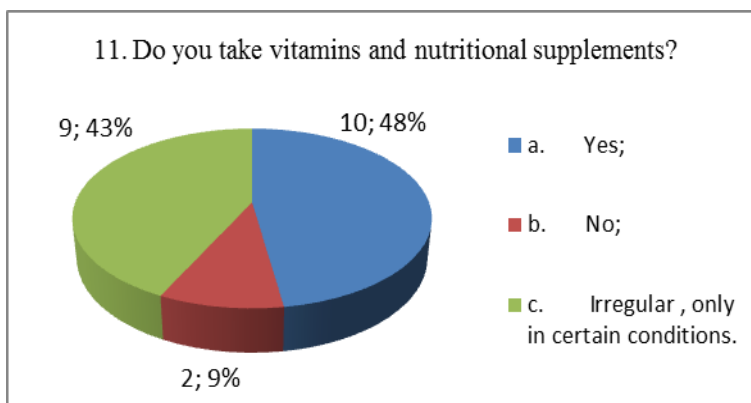


Figure 11. Answers to question №11: „Do you take vitamins and nutritional supplements? “

The younger generation is divided in their opinion regarding the use of mobile applications and electronic devices to monitor various health indicators (such as heart rate,

blood pressure, step count, calories, and others). According to the data, 52% of the students report using such devices, while 48% do not (**Figure 12**).

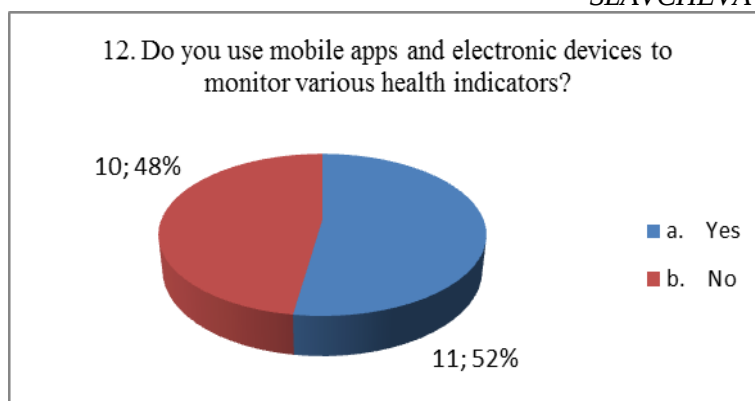


Figure 12. Answers to question №12: „Do you use mobile apps and electronic devices to monitor various health indicators (heart rate, blood pressure, steps, calories, etc.)?”

Figure 13 illustrates the high percentage of students who reported being in excellent psycho-emotional condition during their Erasmus+ studies (57%). An additional 43%

described their condition as good, and not a single student reported feeling in poor psycho-emotional health.

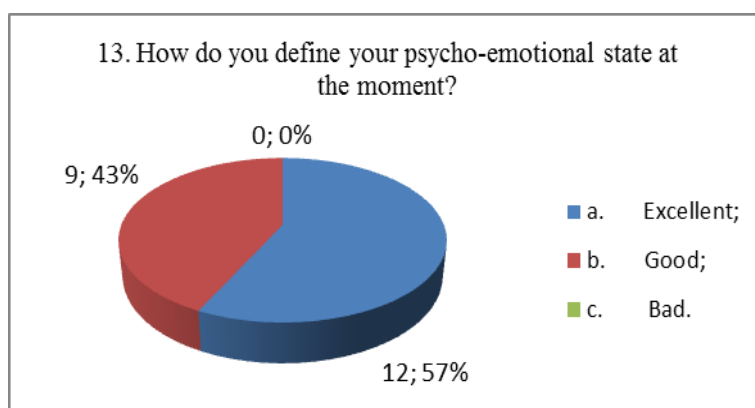


Figure 13. Answers to question №13: „How do you define your psycho-emotional state at the moment?”

Figure 14 shows that an equal proportion of universities (43%) either have or do not have a sports center. Additionally, 14% of the students

indicated that they were unaware of whether such a facility was available at their host institution.

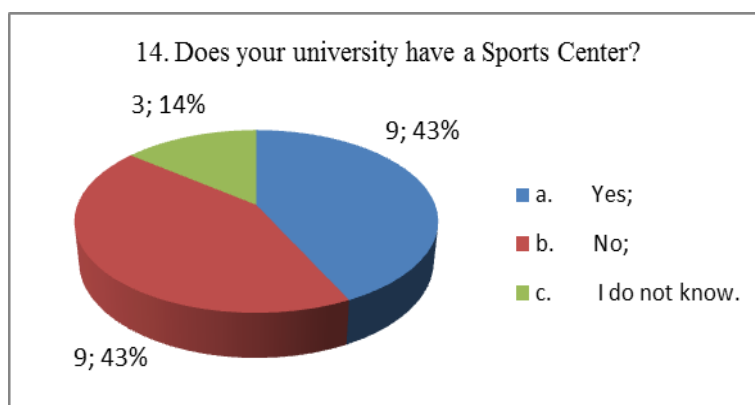


Figure 14. Answers to question №14: „Does your university have a Sports Center?”

The chart in **Figure 15** presents data on the evaluation of the sports facilities and equipment provided by the universities. The responses are distributed as follows: 45% of the participants were unable to assess the condition of the

facilities, 33% rated them as “Good,” 22% considered them “Very Good,” and none of the respondents rated the facilities as either “Excellent” or “Poor.”

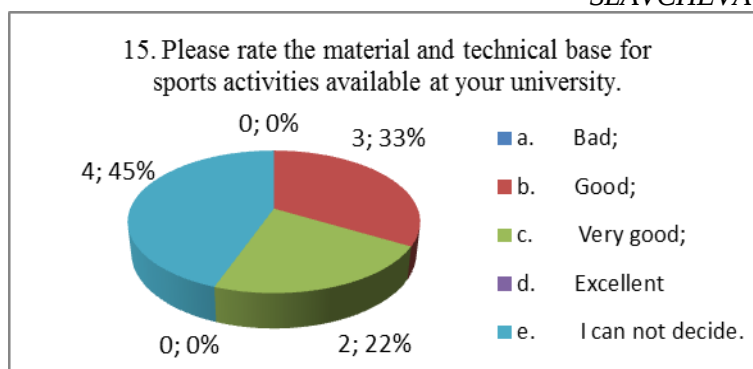


Figure 15. Answers to question №15: „Please rate the material and technical base for sports activities available at your university. “

DICUSSION

The findings of the conducted student survey illuminate several critical dimensions pertaining to students' health status, nutritional behaviors, physical activity patterns, and access to sports infrastructure.

Despite the fact that nearly half of the respondents report an absence of significant health concerns, a considerable proportion acknowledges the presence of chronic conditions—particularly related to pulmonary function and visual acuity. These data underscore the imperative for enhanced preventive health education, improved health literacy, and broader access to adequate medical services within the student population.

Although a substantial number of students claim to adhere to healthy eating practices, only a minority report maintaining such habits consistently. The notably low daily intake of fresh fruits and vegetables signals potential nutritional deficiencies in their regular diet. This highlights the necessity of reinforcing institutional nutrition programs and implementing targeted initiatives aimed at cultivating sustainable healthy eating behaviors across university campuses.

Of particular concern is the limited engagement in physical activity, which—when coupled with maladaptive behaviors such as irregular meal patterns, tobacco use, and excessive consumption of alcohol, caffeine, and energy drinks—may predispose students to long-term health risks. Nevertheless, it is encouraging to observe that a vast majority of respondents acknowledge the value of physical activity and express motivation to engage more actively in sports. This positive disposition presents a strategic opportunity for universities to expand

access to physical and recreational activities as part of a broader health-promotion agenda.

Furthermore, the survey reveals a disparity in the availability of sports facilities across institutions. While existing facilities are generally rated positively by students, their uneven distribution suggests a pressing need to invest in and standardize the physical infrastructure for student wellness and active living across all university settings.

Finally, the high proportion of students reporting satisfactory psycho-emotional well-being is a promising indicator. However, given the substantial academic demands placed on this demographic, it remains crucial for universities to implement ongoing mental health support and resilience-building strategies to safeguard this balance.

CONCLUSIONS

The survey results demonstrate that a considerable proportion of students exhibit a tendency toward adopting a healthy lifestyle and acknowledge the importance of physical activity for their overall well-being. However, their daily routines still show some deficiencies, including irregular eating patterns and insufficient intake of fresh fruits and vegetables. The lack of physical activity and the presence of harmful habits among some respondents point to the need for targeted efforts to increase health awareness and promote engagement in a healthy lifestyle. Moreover, the absence of access to sports facilities at certain universities represents a barrier to increasing physical activity levels among students.

We propose the following recommendations aimed at improving student well-being and supporting the development of sustainable healthy habits:

1. Development and implementation of programs that encourage regular physical activity and healthy eating through educational and practical activities.

2. Investment in sports infrastructure, ensuring that all students have convenient access to facilities for physical and recreational activities.

3. Support for psycho-emotional well-being through counselling services and stress-management programs, particularly during high-pressure periods such as examination sessions.

4. Introduction of informational campaigns on the benefits of balanced nutrition, emphasizing the importance of daily consumption of fresh fruits and vegetables.

5. Promotion of mobile health-monitoring applications, which can assist students in maintaining physical activity and health in the long term.

REFERENCES

1. Nesterova, D. (2008). Purpose, tasks, functions of physical education in modern education. *Journal of Pedagogy*, Vol. XVIII, No. 12, ISSN 0861-3982, pp. 53-62, Sofia.
2. Petkov, P. (2021). Research and comparative analysis of data for indicators of body mass of male university students, *Trakia Journal of Sciences*, Vol. 19, Suppl. 1, pp 886-891, ISSN 1313-3551.
3. Ivanova, M. & P. Petkov (2019). Innovative Methods For Developing Physical Strengths And Endurance In Students, *Trakia Journal of Sciences*, Vol. 17, Suppl. 1, pp 821-825, ISSN 1313-3551.
4. Nedkova, M. (2016). Innovations in the Educational Process of Physical Education and Sports Classes at Universities in the Republic of Bulgaria. Monograph, ISBN:978-619-160-600-9, Avangard Prima, Sofia.
5. Angelova, P. & D. Ignatova, (2024). Applying the Borg's ratings of perceived exertion scale to assess motor development in online university learning, *Trakia Journal of Sciences*, Vol. 22, Suppl. 1, 248-253, Available online at: <http://www.uni-sz.bg>, SSN 1313-3551 (online) doi:10.15547/tjs.2024.s.01.036.
6. Nedkova, M. (2023). Non-Traditional Sports in the Educational System and Part of Physical Education and Sports Classes at Universities in Bulgaria. Monograph, ISBN:978-619-239-859-0, Avangard Prima, Sofia.
7. Bozhkova, A. & P. Slavcheva (2012). Combined fitness gymnastics. Guide for female dental students. ARTGRAPH, ISBN 978-954-9401-72-1, Sofia.
8. Lekina, D. & A. Bozhkova. (2017). Increase of results during swimming training of exercising and non-exercising students. *Journal of Physical Education and Sport*, 17(1), Art 25, pp. 166 – 170, DOI:10.7752/jpes.2017.01025.
9. Bozhkova, A., P. Slavcheva-Hinkova & M. Albert (2013). Motor activity of students with health problems. ARTGRAPH, ISBN 978-954-9401-80-6, Sofia.
10. Bozhkova, A., P. Slavcheva-Hinkova & D. Lekina. (2017). Impact of specialized sports program for students with health issues. *Journal of Physical Education and Sport*, 17 (1), Art 1, pp. 3 - 6, DOI:10.7752/jpes.2017.s1001.
11. Bozhkova, A. (2012). Professionally oriented motor training for students majoring in Medical Rehabilitation, Occupational Therapy. ARTGRAPH, ISBN 978-954-9401-73-8, Sofia.
12. Palma, D. D., Tafuri, D., Asione, A. & G. Raïola, (2018). Sotsialno, turistichecko i obrazovatelno razvitie chrez sport. *Journal of Physical Education and Sport*, 18 (1), Art 67, pp. 473 – 478, DOI:10.7752/jpes.2018.s167.
13. Czupich, M. (2020). Sport as an instrument of social development - the example of London. *Journal of Physical Education and Sport*, 20 (5), Art 390, pp. 2875-2882, DOI:10.7752/jpes.2020.s5390.
14. D'Isanto, T. & Di Tore, P.A. (2016). Physical activity and social inclusion at school: A paradigm change, *Journal of Physical Education and Sport*, 16 (2), Art 176, pp. 1099-1102, DOI:10.7752/jpes.2016.s2176.
15. Angelova, P. (2023). Overview of the research activity of the Department of physical education and sport at Trakia University, *Trakia Journal of Sciences*, Vol. 21, Suppl. 1, 420-424, Available online at: <http://www.uni-sz.bg>, ISSN 1313-3551 (online) doi:10.15547/tjs.2023.s.01.070.
16. Ignatova, D., B. Dimitrova, A. Iliev & P. Angelova (2024). Benchmarking analysis at establishing a culture of wellness. *Forum for Education Studies* 2024, 2(3), 1418, Vol. 2,

- No. 3 (2024), 1-8,
<https://doi.org/10.59400/fes.v2i3.1418>.
17. Ignatova, D. & P. Angelova (2024). Nutritional and motor wellness – basis for harmonious development, *Scientific Journal for Smart Innovations Recreation, Wellness Industry and Niche Tourism*, Vol. 6, Is. 2, 44-50, ISSN: 2603-4921,
- SLAVCHEVA-HINKOVA P., et al.
<https://scjournal.globalwaterhealth.org/current-issue>.
18. Angelova, P. & I. Angelova (2021). Factor influencing the choice of nutritional supplements and vitamins for students, *Trakia Journal of Sciences*, Vol. 19, Suppl. 1, pp 659-662, Available online at <http://www.uni-sz.bg>, ISSN 1313-3551 (online) doi:10.15547/tjs.2021s.01.101.