

Rykiel Zuzanna, Pelic Paulina, Południak Natalia, Drzewi Dominik, Szymańska Natalia, Burakowska Justyna, Skrzek Daria, Suchowicz Katarzyna, Chrzanowski Michał, Czerw Piotr, Rejman Aneta. Selected school solutions in the field of a healthy lifestyle among children and adolescents. *Journal of Education, Health and Sport*. 2021;11(7):79-97. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2021.11.07.007>
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Selected school solutions in the field of a healthy lifestyle among children and adolescents

Rykiel Zuzanna (ORCID: 0000-0003-1023-5607, e-mail: zuzanna.rykiel1199@gmail.com),
Pelic Paulina (ORCID: 0000-0001-9996-7948, e-mail: pinuska666@interia.pl),
Południak Natalia (ORCID: 0000-0003-3907-9361, e-mail: nataliapoludniak99@wp.pl),
Drzewi Dominik (ORCID: 0000-0002-3088-9563, e-mail:),
Szymańska Natalia (ORCID: 0000-0001-6691-9640, e-mail: nszymanska99@gmail.com),
Burakowska Justyna (ORCID: 0000-0002-9428-5873, e-mail:
justynaburakowska216@interia.pl),
Skrzek Daria (ORCID: 0000-0001-8685-2332, e-mail: daria.skrzek@onet.pl),
Suchowicz Katarzyna (ORCID: 0000-0003-0673-1819, e-mail: kaska.suchowicz@spoko.pl),
Chrzanowski Michał (ORCID: 0000-0002-1488-2038, e-mail: mchrzanowski@spoko.pl),
Czerw Piotr (ORCID: 0000-0003-0193-9100, e-mail: piotrekczew@interia.pl),
Rejman Aneta (ORCID: 0000-0002-0277-0856, e-mail: arejman@ur.edu.pl)

Interdepartmental Scientific Circle Law and Economics in Sport “Know–How Sport”,
University of Rzeszów

Abstract

Introduction and aim: Lifestyle is the daily behaviors, habits and activities adopted by people. It is one of the factors that largely determines the state of human health. It is important to pay attention to what habits and activities we implement in our lives. The source of behaviors are usually attitudes and values acquired in the family and the nearest social environment. The basic categories of pro-health behaviours are related to physical health, psychosocial health, health prevention and avoiding harmful behaviours, preventing an illness and supporting recovery. Anti-health behaviors contribute to health disorders, negative impacts in emotional, physical and psychosocial sphere. The aim of the study was to present selected school solutions in the field of pro-healthy lifestyle among children and adolescents, the influence of pro-healthy lifestyle and assessment of the implementation of health education at schools. **Material and method:** 85 children and adolescents in the age range of 10-19+ years participated in the study. Twenty-three students in the age range of 10-12 years, 27 students in the age range of 13-16 years and 35 students in the age range of 17-19+ years were surveyed. Twenty-eight males and 57 females took the survey. **Results:** Respondents most often engage in physical activity 2-3 times per week. The vast majority of respondents actively participate in physical education classes at school as well as undertake extracurricular physical activity. The most popular activities are cycling and team games. The main source of knowledge about pro-healthy lifestyle among children and adolescents is the Internet and the least popular is the press. **Conclusions:** The majority of students know what a pro-healthy lifestyle is, while less than half of the respondents have no such knowledge. The researched gain knowledge about the way of promoting pro-healthy lifestyle by school, most often through the organization of "Health Day". The majority of children and adolescents participate in extracurricular physical activity, while the rest of the respondents do not undertake such activity.

Key words: lifestyle; physical activity; youth; lifestyle.

Introduction

The lifestyle is difficult to define, it has many different meanings, but after Kawczyńska-Butrym, it can be assumed that these are individual daily choices related to the diet, type of rest, use of stimulants, drugs, attitude to work and the level of physical activity. All these aspects are related to health behaviors, among which there are health-promoting and anti-health behaviors. Health-promoting behavior is considered to be physical activity, preventive examinations, rational nutrition or taking care of personal hygiene and mental health. On the other hand, anti-health behavior leads to a threat to human health, it is the use of stimulants such as alcohol, cigarettes, psychogenic substances or accidental sexual contacts. Due to the prevalence of anti-health behaviors among the society, lifestyle can be considered a risk factor for the occurrence of "diseases of choice". Children and adolescents, due to the susceptibility of many stimuli, inborn curiosity and sensitivity, are particularly exposed to a number of risk factors [1,2].

As researchers show, the state of knowledge about health among young people varies greatly. On the other hand, the level of health behavior is often unsatisfactory. Research conducted in 2012 shows that young people learn about lifestyle mainly from their parents and the Internet [3]. As a result of the progress of civilization, more and more children prefer to spend their time passively - watching TV or playing computer games. From year to year, the percentage of young people who prefer to choose sports or play outdoors is becoming smaller. It is also scary that they see nothing wrong with it [4].

Therefore, children should be made aware of the importance of lifestyle from an early age, and then cultivate this awareness. In the future, this may contribute to reducing the risk of "diseases of choice" or civilization diseases in adulthood. Introducing health promotion programs into schools is an important role in developing awareness of a healthy lifestyle. This need was noticed already in the 1990s, when the programs "Kindergarten Promoting Health" and "School Promoting Health" began to be introduced in Poland. Since 2008, the Network of Schools for Health in Europe has also been operating, associating 32 countries [5].

The aim

The aim of the research was to present selected school solutions in the field of a healthy lifestyle among children and adolescents, the impact of a healthy lifestyle and to evaluate the implementation of health education in schools.

Material and methods

85 children and adolescents aged 10-19 + years participated in the study. 23 students aged 10-12, 27 students aged 13-16 and 35 students aged 17-19 + were examined. 28 men and 57 women participated in the survey (Table 1).

Wiek	N	%
10-12	23	27
13-16	27	32
17-19+	35	41

In order to assess a healthy lifestyle among children and adolescents, students filled in an anonymous questionnaire form: "Selected school solutions in the field of a healthy lifestyle among children and adolescents". These studies were anonymous, which influenced the reliability of the answers provided.

Results

Based on the analysis of the question regarding the frequency of physical activity during the week, the largest number of respondents answered that they do physical activity 2-3 times a week, which accounted for 27 students. 26 people did physical activity 4-5 times a week. 17 subjects were physically active twice a week or less. 15 of the respondents declared that they do physical activity every day (Graph 1).

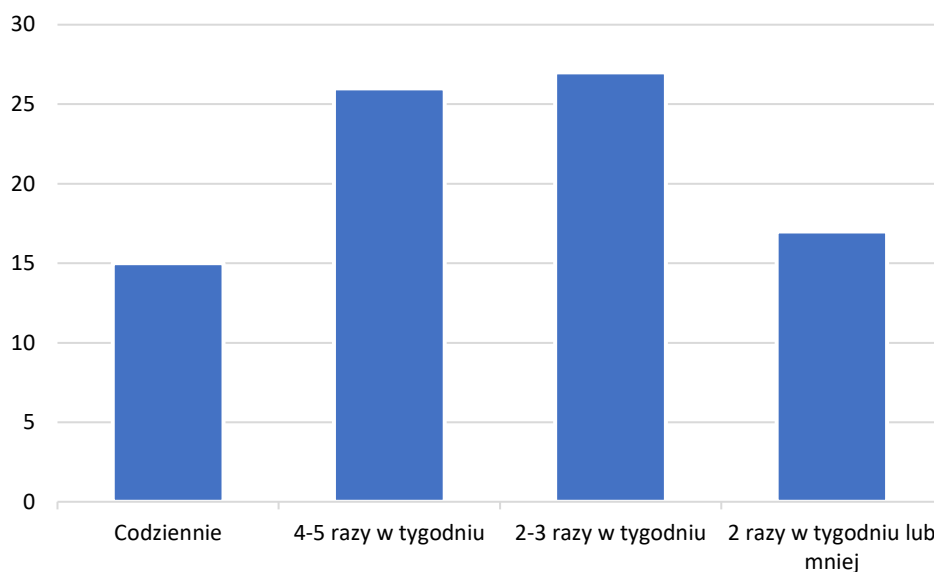


Chart 1. The frequency of the subjects' physical activity during the week

The analysis shows that 69 children and adolescents actively participate in physical education classes at school, the remaining part, ie 16 people, do not participate actively in these classes (Graph 2).

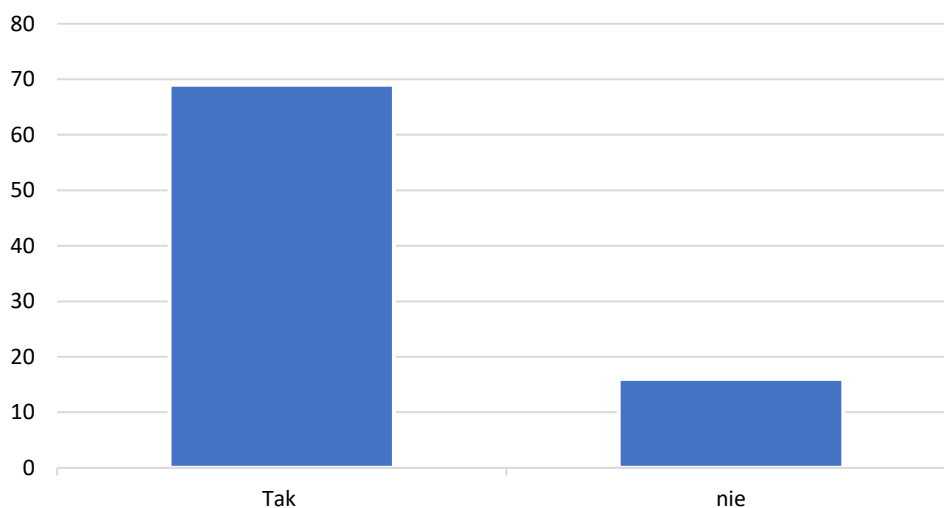


Chart 2. Participation of the respondents in extracurricular physical activity

According to the data, 63 students participate in extracurricular physical activity, the remaining 22 students do not participate in physical activity outside the classroom (Graph 3).

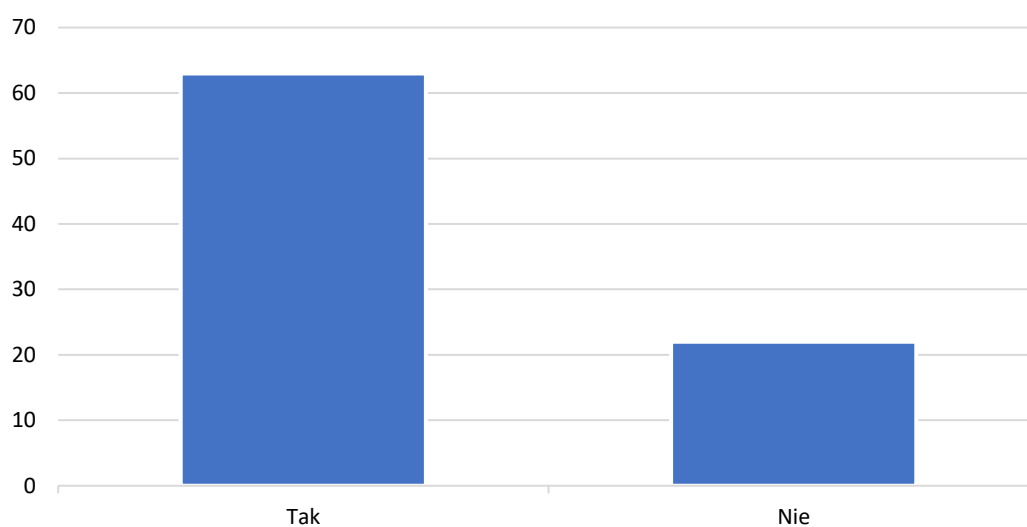


Chart 3. Participation of the respondents in extracurricular physical activity

Analyzing the data in Chart 4, shows that the largest group of respondents spend an hour a day on physical activity. Among children and adolescents, 27 students spend 30 minutes a day on physical activity, 21 students spend an hour and a half a day. The smallest group among the respondents is the group that spends more than 2 hours a day on physical activity and they constitute 7 people.

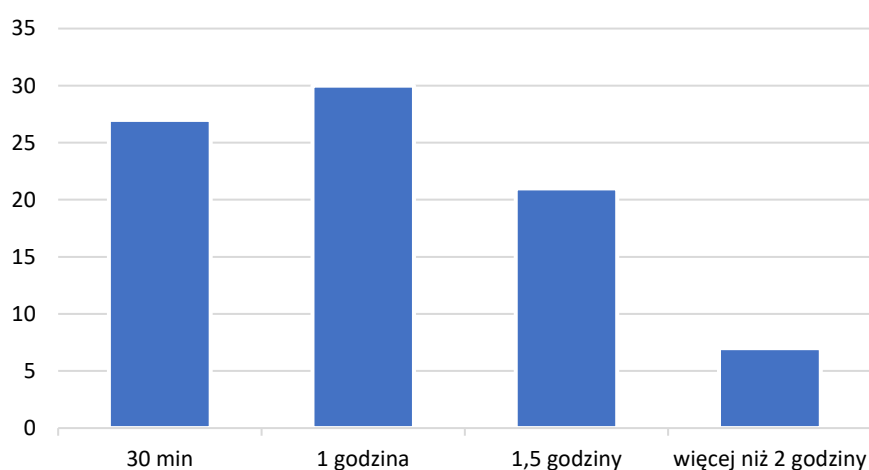


Chart 4. Time spent by the respondents for physical activity during the day

The analysis shows that cycling is the most popular form of physical activity among the respondents. Among the surveyed, 26 students choose team games as physical activity, 18 students choose movement games, 18 students - athletics, and 15 students - swimming (Graph 5).



Chart 5. The most frequently practiced physical activity among the respondents

Data show that 33 students have a sleep duration of more than 8 hours. A sleep duration of 8 hours occurs in 25 students, while 27 students sleep less than 8 hours (Graph 6).

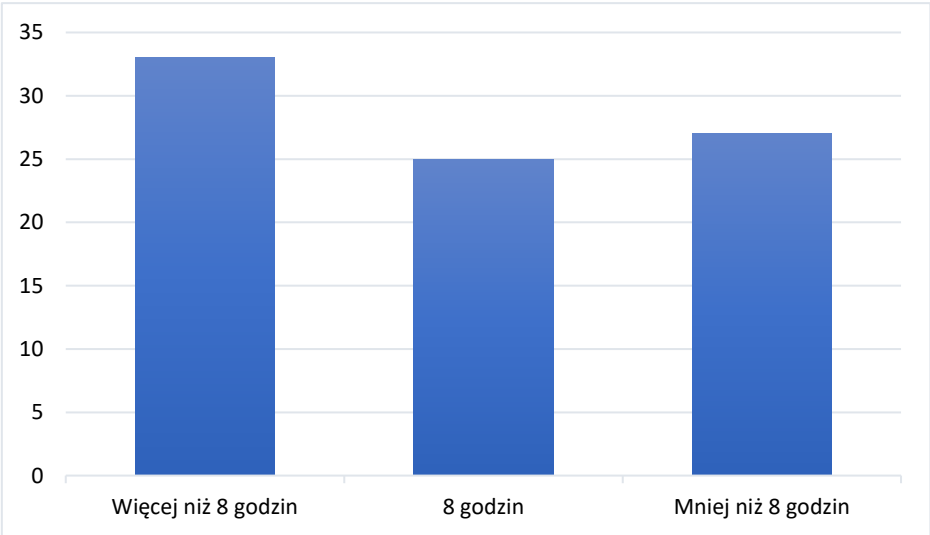


Chart 6. The duration of the subjects' sleep

Based on the figures in Figure 7, it can be concluded that the largest number of respondents eat 4 meals a day and they constitute 36 of the respondents. Slightly fewer people eat 5 meals a day, 20 students eat 3 meals a day, and the smallest group of respondents, 6 people, eat more than 6 meals a day (Graph 7).

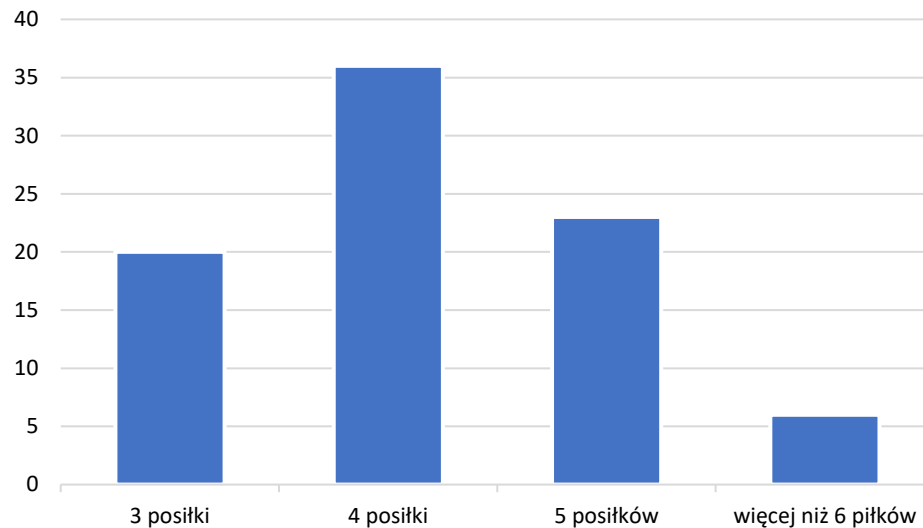


Chart 7. Number of meals consumed during the day

Among the surveyed, 50 students eat a lot of vegetables and fruit during the day, the remaining part of all respondents does not eat a lot of vegetables and fruit (Graph 8).

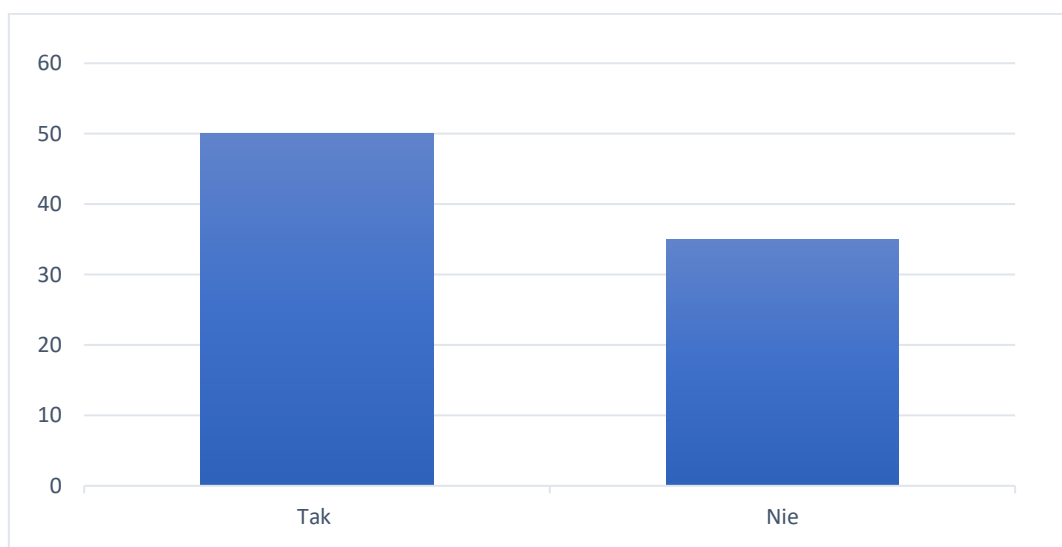


Chart 8. Consumption of large amounts of vegetables and fruit by the respondents

Consuming the right amount of water during the day is a very important activity, according to the data, unfortunately only 17 students from the respondents consume more than 2 liters. 1.5 liters of water are consumed by 25 respondents during the day. Among the surveyed, 31 students consume 1 liter of water daily. On the other hand, the smallest amount of water during the day, i.e. less than 1 liter, is consumed by 12 people out of all respondents (Graph 9).

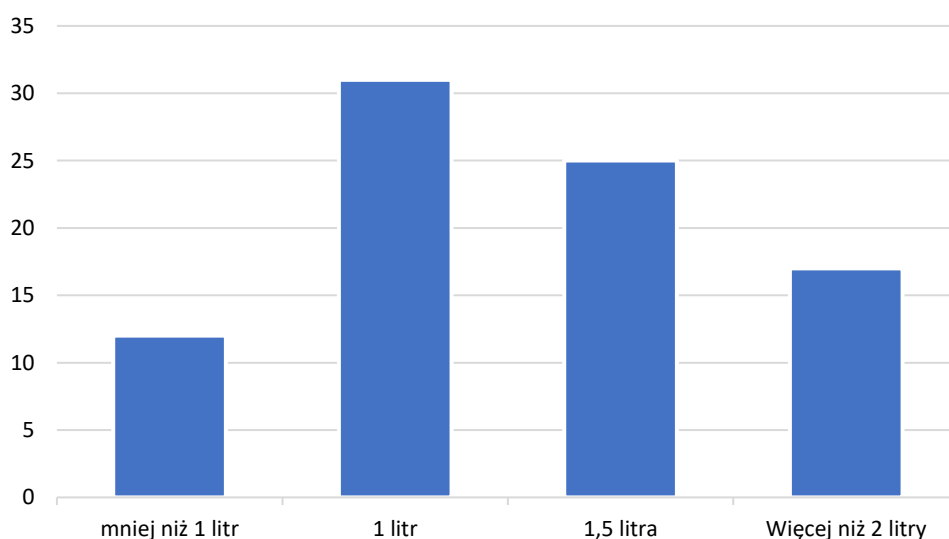


Chart 9. The amount of water consumed by the respondents during the day

According to the data, the largest group of 48 people are students who believe that they rather follow the rules of the nutrition and physical activity pyramid. 26 of the respondents believe that they rather do not comply with these rules, 6 students say that they comply with these rules, and 5 students say that they do not follow them (Ex. 10).

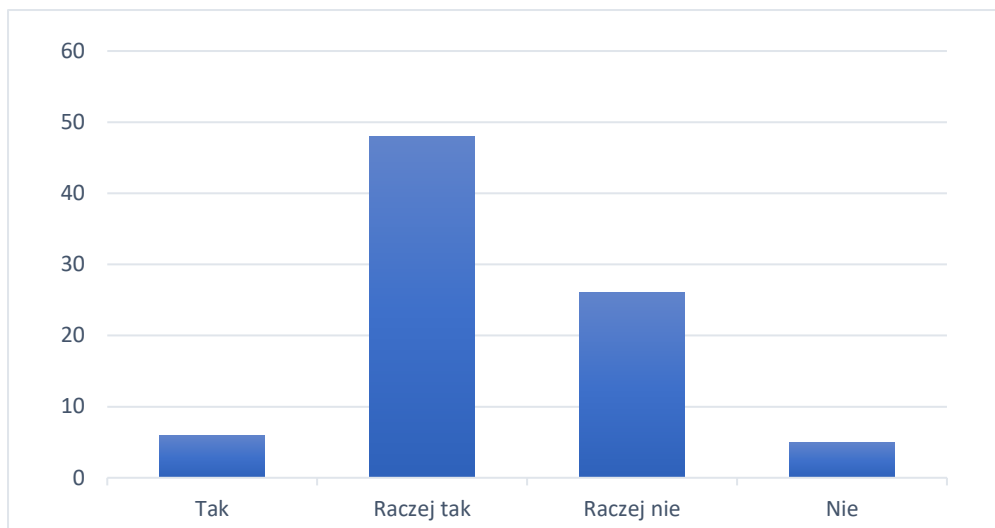


Chart 10. Compliance with the principles of the nutrition and physical activity pyramid

Among the surveyed, 36 people believe that their diet contains an adequate amount of vitamins. 14 people from the entire group claim that their diet does not contain an adequate amount of vitamins, while 35 of all respondents do not know whether their diet contains an adequate amount of vitamins (Graph 11).

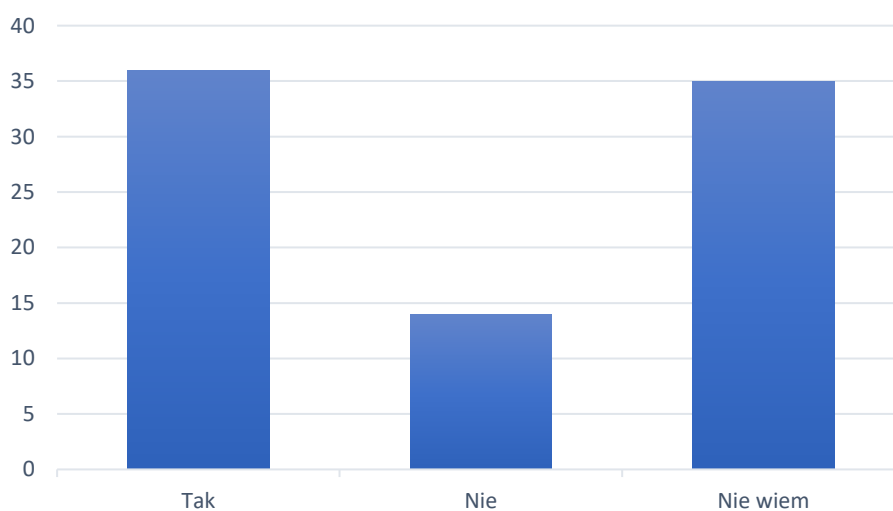


Chart 11. Adequate amount of vitamins in the diet

Analyzing the data, it can be concluded that 23 students eat sweets every day, 38 respondents eat sweets 3-4 times a week, while a group of 24 respondents eat sweets once a week or less (Graph 12).

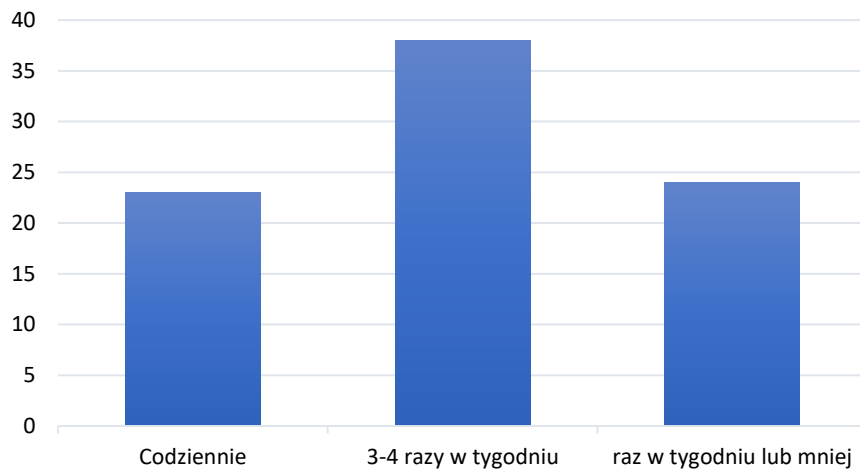


Chart 12. The frequency of eating sweets

As the chart shows, a vast number of respondents, i.e. 55 people, believe that they know what a healthy lifestyle is, while 30 people from the entire group do not know what a healthy lifestyle is (Graph 13).

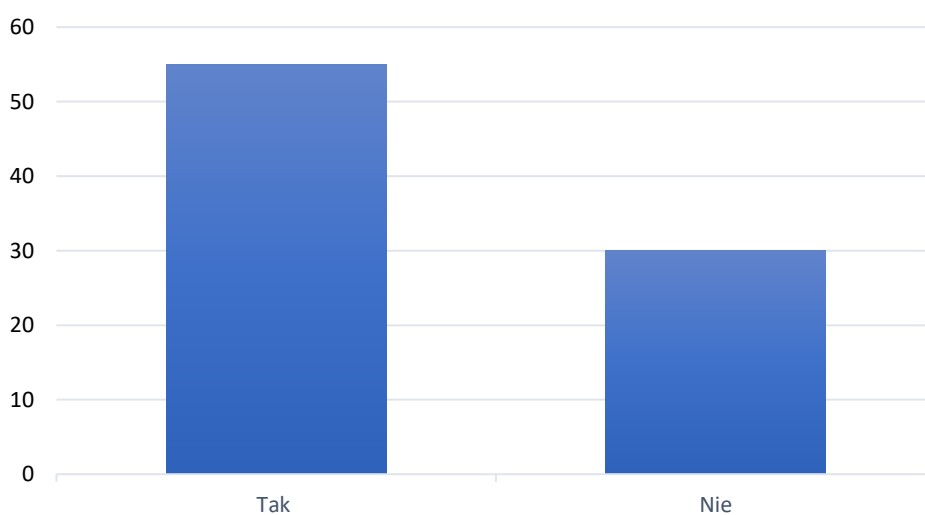


Chart 13. Understanding the concept of a healthy lifestyle

Based on the analysis of the multiple choice question, it can be seen that most people get information from the Internet. School, family and books were ranked next. On the other hand, students learn the least from television and the press. (Ex. 14).

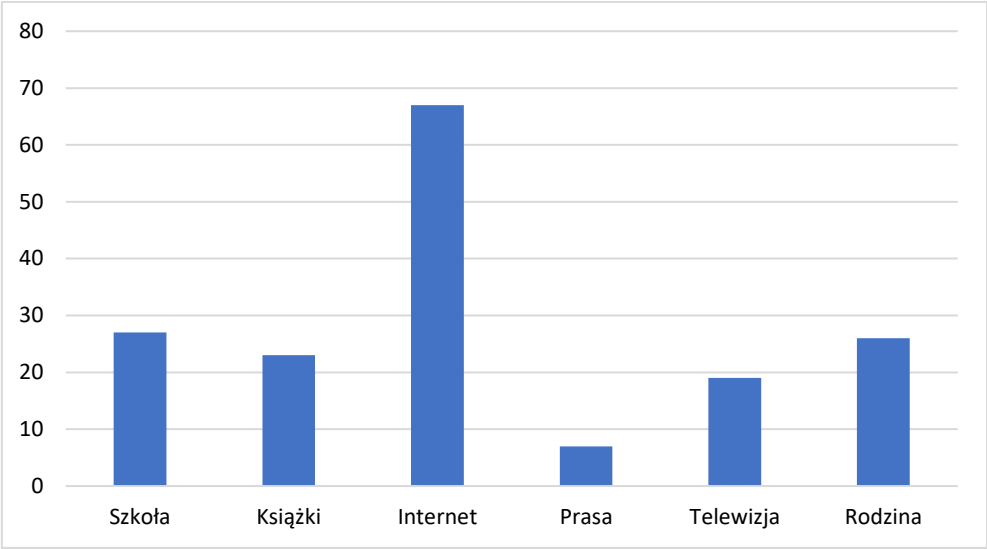


Chart 14. Sources of obtaining knowledge about a healthy lifestyle by the respondents

According to the data, 34 students believe that the school promotes a healthy lifestyle, 39 students do not have an opinion on this subject, and 12 students say that the school does not promote a healthy lifestyle (Graph 15).

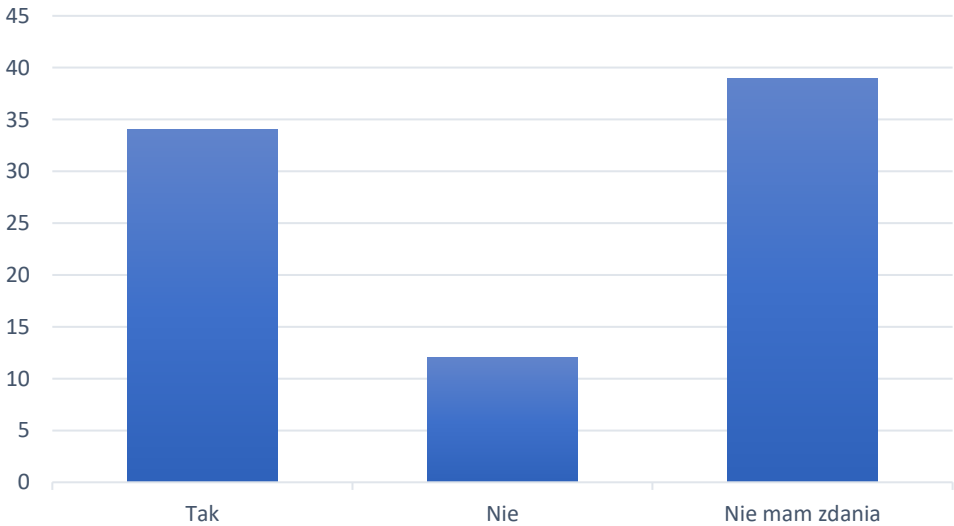


Chart 15. Promoting a healthy lifestyle by the school

The multiple choice question about promoting health by the school showed that the school promotes health mainly through the organization of the "Health Day", school newsletters, brochures and through the use of wholesome products in the school shop. To a lesser extent, through additional activities related to a healthy lifestyle and meetings with famous sportsmen (Graph 16).

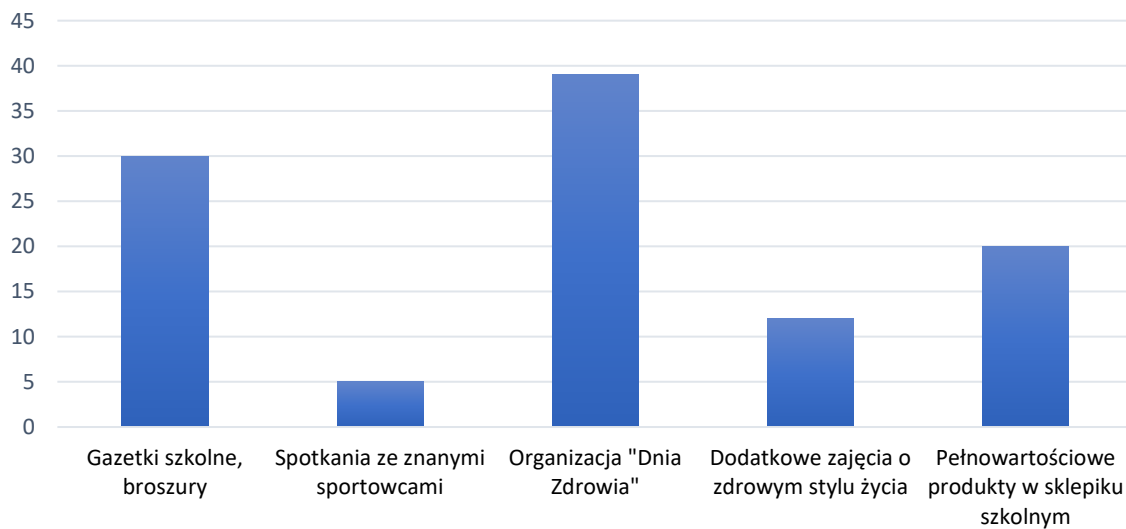


Chart 16. How school promotes health

Analyzing the data in Figure 17, it can be concluded that more than half of the respondents believe that the school provides adequate information about the negative effects and impact on health of alcohol and tobacco products. Out of all respondents, 25 people did not have an opinion on this subject, and 10 people out of all respondents said that the school did not provide such information.

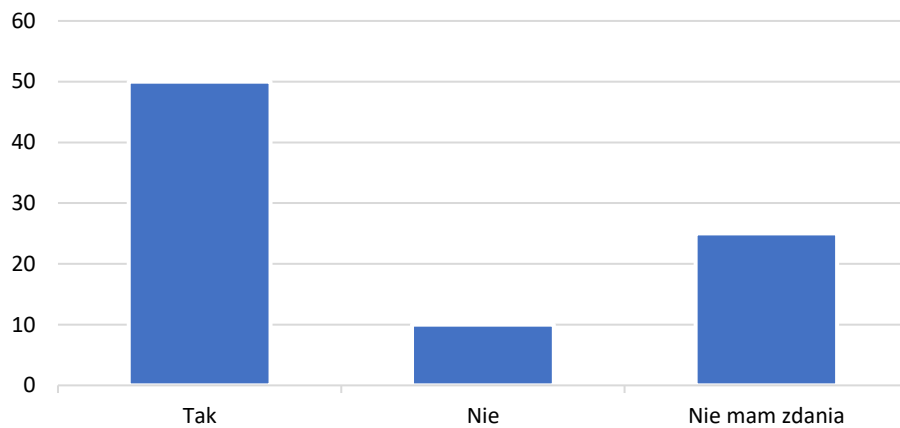


Chart 17. Providing adequate information by the school about the negative effects and health effects of alcohol and tobacco products

The analysis shows that 37 out of all respondents believe that PE teachers are rather involved in providing knowledge about a healthy lifestyle. Slightly fewer, or 26 people, say that teachers are committed to providing this information to students. 16 respondents believe that teachers are rather not involved in providing knowledge about a healthy lifestyle. The smallest group of respondents are students who believe that teachers do not provide such information and they count 6 people from all respondents (Chart 18).

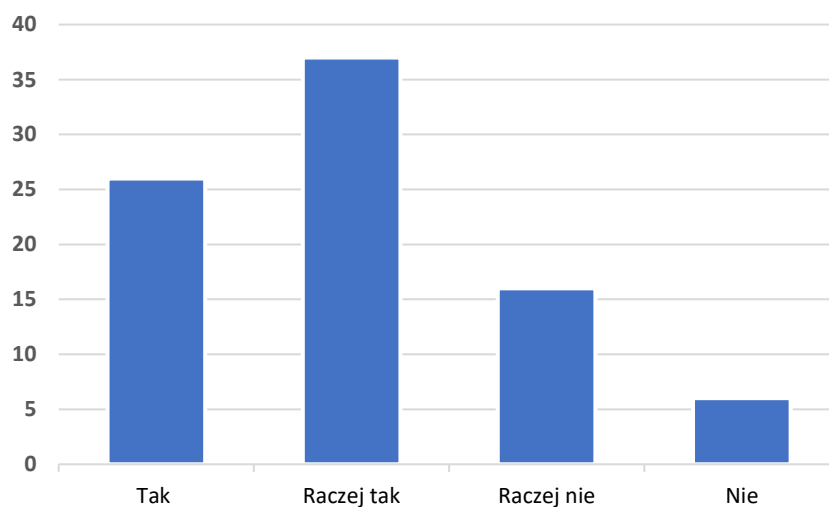


Chart 18. Provision of knowledge by Physical Education teachers about a healthy lifestyle

According to the data, 44 students believe that are in good health condition, 31 of them say that their health is very good, 9 students describe their health as average, and 1 student thinks that their health is in a bad level. (Chart 19).

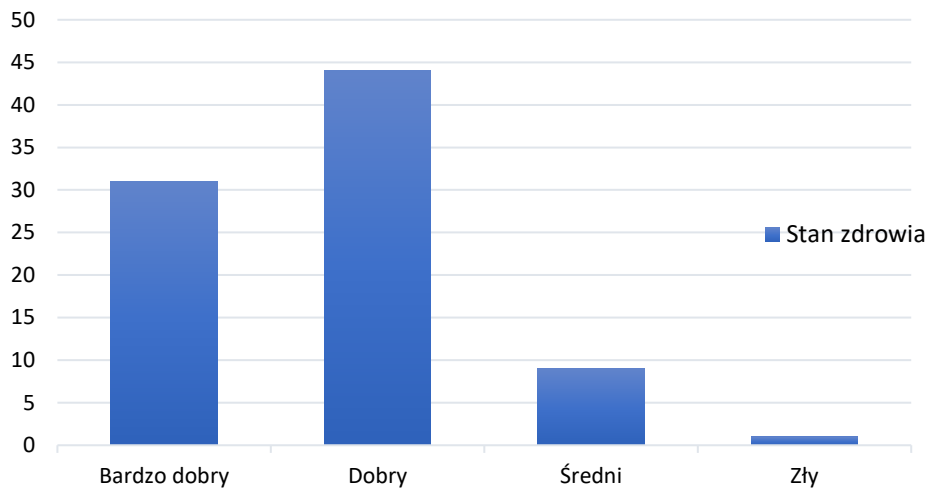


Chart 19 The health of the respondents

Discussion

85 people, including 57 girls and 28 boys, took part in an anonymous survey entitled: "Selected school solutions in the field of a healthy lifestyle among children and adolescents".

Lifestyle understood in terms of pro-health aspects are those activities that cause the health to improve and the person is less exposed to diseases.

The first research problem related to the state of knowledge about a healthy lifestyle among children and adolescents. Thus, the results show that 65% of people know what a healthy lifestyle is, while the remaining part, i.e. 35% of the surveyed students, do not have such knowledge, which may result in more frequent development disorders.

The second research question related to the finding of how the school promotes a healthy lifestyle. The most frequently chosen option was the organization of the "Health Day". In addition, numerous school newspapers and brochures play an important role here.

The last research question was to determine whether children are willing to participate in physical activity after school hours. Most children and adolescents, i.e. 74%, actively engage

in physical activity during their free time from class. The rest of the respondents, which constitute 26% of the respondents, do not participate in physical activity.

Comparing a few selected results of this research with the articles of other authors, we observe some similarities.

In the question about the frequency of physical activity, the greatest number of people undertook physical activity 2-3 times a week, while the fewest do physical activity every day. In Michota-Kotulska, on the other hand, the greatest number of people declared physical activity 3 times a week or more, and the least marked the answer that no such effort was undertaken at all [6].

Another question is whether students often exercise in physical education classes. The respondents indicated that they participate in lessons, while people from Mazur's research were asked about the frequency of participation in classes in this subject, the majority declared that they often attend physical education classes [9].

The third question related to participation in extracurricular physical activity. This research shows that the vast majority of children undertake such activity, the same observations are noted by Zimna-Walendzik et al. [8].

The answer to the next question was to determine the amount of daily time devoted to physical activity. In the following studies, most people chose the 1 hour option, slightly fewer children chose 30 minutes devoted to physical activity, the next one was chosen 1.5 hours, and the least people chose the option more than 2 hours. In the studies by Bednarek and Bednarz, the most people also selected 1 hour. At the moment when the given options had an increasing number of hours, proportionally fewer people selected these propositions [7].

The next question concerned the type of physical activity most often chosen by students. The authors' own research shows that children prefer cycling, followed by team games, followed by physical games and activities, and swimming was the least frequently chosen option. In Michota-Katulska's case, cycling and team games are also in the first two places, then children chose strength exercises, and the fewest marked aerobics [6].

In the presented studies, most people indicated that they eat 4 meals a day, the second most frequently chosen answer was 5 meals, slightly fewer people selected 3 meals, and only a few people chose the option above 6 meals. Research conducted by Michota-Katulska et al. Shows that children most often choose 4 meals a day. Slightly fewer people eat 3 meals, then 5 meals [6]. In response to the question about the amount of fruit and vegetables consumed, most children declared a high consumption of fruit and vegetables. In Michota-Katulska et al., Most children consume the above-mentioned elements daily, with a predominance of fruit [6].

The next question related to the frequency of consumed sweets. The present research shows that the most frequently chosen answer was the consumption of sweets 3-4 times a week, the second most selected answer was "daily", and the least number of people chose the answer "once a week or less". The results of Mazur's research show similar answers were given by the respondents in Mazur's research. The order of the selected answers was as follows: several times a week; once a week; more than once a week; every day; it's hard to say [9].

In response to the question whether children know what a healthy lifestyle is, in the present study, most of the students marked the answer "yes". In Michota-Katulaska's research, most people also have such knowledge [6].

Conclusions

1. Physical activity has many health benefits. The research shows that 27 students engage in physical activity 2/3 times a week.
2. The majority, as many as 69% of children and adolescents, actively participate in physical education classes at school.
3. Research shows that extracurricular physical activity plays a very important role in the lives of children and adolescents.
4. Most children spend an hour a day being physically active during the day.
5. Cycling turned out to be the most popular physical activity among the respondents.
6. Sleep is fundamental to our health. 33 students replied that they sleep more than 8 hours.
7. The basic principle of rational nutrition is to consume an appropriate number of meals during the day. In their opinion, the respondents eat four meals a day.
8. Vegetables and fruit should be a regular part of your child's daily diet. More than half of the respondents said that they eat a lot of them during the day.
9. The basis of the food pyramid, which is one of the most important dietary recommendations, is to drink the right amount of water, unfortunately only 17 students drink more than 2 liters of water a day.
10. The data show that the majority of 48 people rather follow the rules of the nutrition and physical activity pyramid, while 5 respondents do not take them into account.
11. Of the total group, only 36 people know that their diet contains an adequate amount of vitamins, while as many as 14 say that their diet lacks vitamins.

12. Excessive consumption of sweets is not beneficial for health, while analyzing the results of the research, it can be concluded that 23 students eat them every day.
13. A significant number of respondents, 55 people, believe that they know what a healthy lifestyle is.
14. The most common source of learning about a healthy lifestyle by the respondents is the Internet. On the other hand, students obtain the least amount of information from the press.
15. Out of the surveyed, 34 students believe that the school promotes a healthy lifestyle, but 12 say that the school does not promote a healthy lifestyle.
16. The school promotes health by organizing the "Health Day", school newspapers, brochures and wholesome products in the school shop.
17. More than half of the respondents believe that the school provides adequate information about the negative health effects of alcohol and tobacco products.
18. Of all the respondents, 26 believe that PE teachers are committed to providing knowledge about a healthy lifestyle.
19. Out of 85 respondents, 31 of them say that their health is very good, 44 say that their health is good, and 1 student thinks their health is bad.

References

1. Cieślukowska J. School tasks in the field of health promotion, and general pedagogical competence of teachers to undertake them. Paragraph. 2007: 207-212.
2. Ponczek D, Olszowy I. Youth lifestyle and its impact on health. Hygiene and epidemiology problems. 2012;93(2):260-268.
3. Ponczek D, Olszowy I. Assessment of youth lifestyle and awareness of its impact on health. Hygeia Public Health. 2012;47(2):174-182.
4. Stankiewicz M, Pieszko M, Śliwińska A, Małgorzewicz S, Wierucki Ł, Zdrojewski T, et al. The prevalence of overweight and obesity as well as the knowledge and health behavior of children and adolescents in small towns and villages - the results of the Polish Project of 400 Cities. Endocrinology, Obesity and Metabolic Disorders. 2010;6(2):59-66.
5. Education Development Center [cited 2016 May 20]. Available from: <https://www.ore.edu.pl/>

6. Michota-Katulaska E, Zegan M, Zyznowska W, Sińska B, Kucharska A. Selected elements of the lifestyle of junior high school students. *Polish Nursing*. 2015;56(2):121-126.
7. Bednarek A, Bednarz M. Health behaviors of boys and girls in younger school age. *General Medicine and Health Sciences*. 2013;19(3):305-312.
8. Zimna-Walendzik E, Kolmaga A, Tafalska E. Lifestyle - physical activity, dietary preferences of children finishing primary school. *Food Science Technology Quality*. 2009;16(4):195-203.
9. Mazur P. Healthy lifestyle of younger schoolchildren in Belarus. Research report. Chełm; 2016.