



## KNOWLEDGE AND ATTITUDE OF HIGH SCHOOL STUDENTS TO A HEALTHY LIFESTYLE

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### ABSTRACT

The way of living influences to a great extent the human health. It's one of the main reasons for the occurrence and development of a number of common and serious diseases – both chronic and infectious. The purpose of this study is to reveal the knowledge, attitude and behavior of 15-year-old students to given aspects of the healthy lifestyle. In the survey 110 ninth-graders (23 boys and 87 girls) from one school in Sofia were included. The following scientific methods were used: theoretical analysis, questionnaire research, statistical methods. The results were processed by frequency analysis.

The results show that 59.1% of the respondents determine their daily physical activity as high enough to maintain a healthy lifestyle. An alarming fact is that over 40% of the studied students have some harmful habits such as alcohol and cigarettes abuse while about 50% of them have unhealthy eating habits. On the other hand, about 69% of students indicate that their lifestyle is healthy.

Conclusion: There is a certain discrepancy and contradiction in the answers of some questions posed. That makes us to conclude that a certain part of the respondents haven't enough knowledge and understanding about the health components and the meaning of the term "healthy lifestyle".

**Key words:** survey, 15-year-old boys and girls, harmful habits, physical activity

### INTRODUCTION

Modern technologies are rapidly and uncompromisingly entering the daily life of any person and society as a whole. Thus the human inactivity is increased which in combination with an unhealthy nutrition and some other harmful habits, worsen the health parameters of adolescents and leads to the appearance and development of socially significant diseases, one of which is obesity.

It has been scientifically proven that with the means of physical education and sports combined with a healthy and balance nutrition is possible to counteract hypodynamia, the increasing disbalance between the students physical and mental performance and all other negative consequences of the low physical activity. So, it means that the purposeful physical activity has a positive impact on the

physical, neuropsychic reactivity and functional fitness of the body. In addition the family is also an important factor in overcoming these tendencies and for the development of interests, motives and needs for physical activity.

Alarming results were shared by Brujin and al., 2021, who found that even at the initial stage of basic education, there was a decrease in students' motivation to participate in the physical education learning process (1).

On the other hand, a number of authors have established the significant role of self-confidence in one's own abilities, which indirectly affects the development of students' physical abilities (1-6). Self-confidence is a basic psychological factor that motivates students to be active in physical education classes, where the physical load of students is higher and affects positively their physical abilities. It is a well-known fact that students inner motivation for active participation in the physical education process is the pleasure and joy of the physical activity which makes them more active and concentrated in this process (7-8).

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A great number of studies found that 20.3% of Bulgarian students at the age of 9 were overweight, 8.5% were obese, and 13.5% were underweight (9). So about 42.3% of students are beyond the body weight norms (9). Another research with students in grades III and IV found that 100% of them met the requirements of the world health organization for the weekly volume of physical activity (10). The experiment was carried out using an accelerometer and with the help of statistical formulas, information about the intensity of the students' physical activity was obtained. It was established that students spent 26 minutes per day in submaximal to maximum intensity physical activity, 222 minutes - in moderate-intensity physical activity, and 92 minutes in low-intensity physical activity. In another study, the same authors (11) found that every third student was overweight, and every second student had a lower percentage of muscle mass compared to the norm for the age studied.

These data give us the possibility of making the conclusion that another factor instead the physical activity, but with similar importance, exists and is closely related to the problem concerning students overweight and obesity. In our opinion, the nutritional habits of students may be one of the more important factors responsible for this problem.

**The aim** of this study is to reveal the knowledge, attitude and behaviour of 15-year-old students to some aspects of the healthy lifestyle.

## MATERIAL AND METHODS

**The object** of the study is the life style of high school students. **The subject** is the attitude of the same students to the healthy lifestyle. A total of 110 ninth-graders (23 boys and 87 girls) from one school in Sofia participated in the survey. The survey was conducted in the 2020/2021 school year with students who were 15 years old at the time of the study.

The following scientific methods were used: theoretical analysis, sociological survey, statistical methods. The survey was anonymous and included 11 closed questions. In that report only 5 of them connected with the theme were analyzed. The analysis of the results was performed using the IBM SPSS Statistics 26.0. The data were processed by frequency analysis.

The questionnaire was given to the students at the beginning of the lessons. They were asked to participate voluntarily and were informed about the objective of the study as the data confidentiality and anonymity were guaranteed. The study follows the ethical guidelines of the Bulgarian educational ministry.

## RESULTS

**Table 1** presents the results of the survey – summarized and differentiated by gender.

Analysing the answers to the question "Do you think your daily physical activity is sufficiently enough to maintain your health and fitness at good level?" the majority of the respondents – 59.1% – give a positive answer, about 19.1% indicate that their daily physical activity does not have a positive effect on their health and performance and 21.8% have no opinion on that issue.

Comparing the results of boys and girls it is obvious that more boys (73.9%) than girls (55.2%) confirm the opinion that their everyday activities have enough health benefits. Negative answer is given by 21.7% of the boys and 19.5% of the girls. One boy (4.3%) and 22 girls (25.3%) give the answer "I have no opinion". To the question "What is your attitude towards smoking and alcohol consumption?" – totally 57.3% of all respondents answer that they have a negative attitude towards these harmful habits (57.5% of the girls and 52.2% of the boys). About 16.1% of the schoolgirls approve the intake of these substances while 25.3% of them accept their reasonable use. 8.7% of the boys approve smoking and alcohol intake, and 39.1% accept these habits within "reasonable" limits.

From the answers to the question: "Do you have healthy and balanced nutritional habits?", it is found that only 41.8% of the respondents follow a healthy diet, 40.9% indicate that they eat healthy "sometimes" and about 17% say that they do not follow any diet. About 37.9% of the girls answer that they have healthy and balanced nutrition every day, 44% follow a certain diet sometimes and 17% do not eat healthy at all.

More than 50% of the boys say they follow a diet in their daily life, 30% eat healthy from time to time, and 17% do not comply with a healthy diet.

**Table 1.** Results of the survey

Question	Total		Girls		Boys	
	Count	%	Count	%	Count	%
<b>Do you think your daily physical activity is sufficiently enough to maintain your health and fitness at good level?"</b>						
Yes	65	59,1	48	55,2	17	73,9
No	21	19,1	17	19,5	5	21,7
I have no opinion	24	21,8	22	25,3	1	4,4
<b>What is your attitude towards smoking and alcohol consumption?</b>	Total		Girls		Boys	
	Count	%	Count	%	Count	%
Negative	63	57,3	50	57,5	12	52,2
Positive	16	14,5	14	16,1	2	8,7
Using in "reasonable limits"	30	27,3	22	25,3	9	39,1
No answer	1	0,9	1	1,1	0	0
<b>Do you have healthy and balanced nutritional habits?</b>	Total		Girls		Boys	
	Count	%	Count	%	Count	%
Yes	46	41,8	33	37,9	12	52,2
No	19	17,3	15	17,3	4	17,4
From time to time or sometimes	45	40,9	39	44,8	7	30,4
<b>Do you follow a low-calorie diet?</b>	Total		Girls		Boys	
	Count	%	Count	%	Count	%
Yes	15	13,6	12	13,8	3	13
No	57	51,8	41	47,1	16	69,6
Sometimes	38	34,6	34	39,1	4	17,4
<b>Do you have/maintain a healthy lifestyle?"</b>	Total		Girls		Boys	
	Count	%	Count	%	Count	%
Yes	76	69,1	57	65,5	19	81,8
No	29	26,4	25	28,7	4	18,2
No answer	5	4,5	5	5,8	0	0

The results of the question "Do you follow a low-calorie diet?" show that 13.6% of respondents /both sexes/ follow a low-calorie diet, 34.6% of them do it sometimes, and 51.8% of students give a negative answer to this question. Similar answers are given by girls – 13.8% of them follow a low-calorie diet, 39.1% do this from time to time, and 47.1% do not. Among boys, only 13% indicate that they follow a low-calorie diet, 17.4% – sometimes, and 69.6% do not follow such a regimen.

The next question from the survey is of a common nature and combines the information from the previous questions.

The question is: "Do you have/maintain a healthy lifestyle?" about 76 of the respondents indicate the answer "yes" (69%) and 29 (26.4%) give the answer "No". About 65.5% of the girls

answer positively to that question, 28.7% give a negative answer and 5.8% do not answer that question. Concerning the boys – 81.8% confirm that they have a healthy lifestyle, and 18.2% of them answer - "No".

## DISCUSSION

Physical activity and healthy and balanced nutrition are an essential components of a healthy lifestyle. That is why in this study we focused our attention on these 2 components of health.

From the results, we find that about 60% of students studied believe that their physical activity is sufficiently enough to provide a positive effect on their performance and health. However, this does not correspond to the results of a number of studies (12-14, 15) which report that nearly 70% of students do not meet the

requirements of the world health organization for the necessary level of every day physical activity.

Moreover, a decrease in physical activity during physical education lessons is observed too. E. Nikolova (16), found that only 15% of the pupils achieved the required level of physical load. In 45% of them the effect of the physical load have average values and in 40% – no effect of physical load is found.

In our opinion to a certain extent these contradictions are due to the lack of students' knowledge about the quantity and quality of their everyday habitual physical activity. It is necessary the physical education and sports teachers to provide students with the appropriate knowledge on that problem and to motivate them for higher physical activity. The family also have a special role in that aspect forming sports habits and motivating their children for practicing different physical activities and sports in their everyday life and leisure time.

Another contradiction is also found analysing the answers of the question "What is your attitude to smoking and alcohol consumption?". A worrying tendency mentioned by other authors too (16), about 40% of our respondents have a positive attitude towards these harmful habits. It is well known that smoking and alcohol consumption affect the physical and psychical health and provoke extremely adverse consequences in a long-term perspective (12). So, it is obvious that prevention campaigns should be held by giving information about the harms of smoking and alcohol consumption, especially in adolescence.

Moreover here will be mentioned the role of the teachers who should be a model for the students concerning their behaviour, habits and lifestyle. In this study, we try to connect students' knowledge and attitude towards physical activity with the knowledge of the basic principles of healthy nutrition.

As we have already mentioned, 41.8% of all students studied indicate that their nutrition is healthy and balanced, and about 17% of them say that they have not any healthy nutritional habits. It is of an interest that a larger proportion of all respondents are boys, who share that they eat healthy and balanced. In general, in this age period, more girls strictly take care about their body structure. That makes us believe that students are not aware of the main benefits of

healthy nutrition. Schoolgirls often follow low calorie diets in order to achieve the desired figure.

The answers to the next question "Do you follow a low-calorie diet?" confirm this trend. More than 50% of the schoolgirls follow at the moment or in the past such a regimen. This means that every second girl have gone through such low calorie diet. As already mentioned, schoolgirls believe that these diets are the best tool for maintaining the desired figure, neglecting the healthy and balanced nutrition in connection with appropriate amount of physical activity.

Another interesting result is that nearly 30% of the boys or every 3rd student has also tried a low-calorie diet. Having in mind that a larger number of them are in the phase of their puberty development, they need an optimal quantity and quality of macro- and micronutrients. So, a low-calorie diet during this age period can lead only to pathological and irreversible conditions in the still growing organism.

In that connection are the results of O. Hristov et al. Who found that every third student in our country has a lower percentage of muscle mass compared to the norm for the given age (11). It may turn out that the problem of underweight and malnutrition is just as important as the problem of overweight.

The results of the last question from our questionnaire confirm the trend of contradictory answers of some of the respondents, giving us an idea of the lack of enough knowledge and understanding about the healthy and active lifestyle. As we found, 65.5% of female students and 81.8% of male students indicated that they have healthy lifestyle. But however, there is a certain discrepancy between the answers to this question and the answers to the other questions analysed above, namely: "What is your attitude to smoking and alcohol consumption?", "Do you eat a healthy and balanced diet?", "Do you follow a low-calorie diet?".

## CONCLUSION

There is a certain discrepancy and contradiction, as well as certain gender differences in the answers to some of the questions posed, which gives us a reason to believe that a certain part of the respondents do not have the necessary knowledge and understanding about the main components of health – regular physical activity and balanced nutrition, as well as about the

meaning of the term "healthy lifestyle" as that is much more valid for girls.

These facts lead us to the conclusion that it is necessary to provide more and more in-depth knowledge and information to students about health and its components, healthy and active lifestyles.

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