

## PREVENTION AND HEALTH EDUCATION

### CHAPTER I

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### ***Modern risks of living and health of children and young people***

#### **Współczesne zagrożenia życia oraz zdrowia dzieci i młodzieży**

Key words: young people life-threatening health risks, drugs, sport

Słowa kluczowe: młodzież, zagrożenie życia, ryzyko zdrowotne, leki, sport

The primary and fundamental purpose of human life is procreation and care for the existence and development of the offspring. Analysing the evolution of life on earth can say that man is one of the mammals that long care of their offspring. Care and supervision of the offspring are the most important tasks of parents, supervision is supported by close family, and after reaching school age also by teachers.

Continuous development of economic and industrial world carries many risks for a single unit [3]. Falling down the traditional family model, which until a few years ago allowed a man to support his family. Today, to keep your family needs to work two parents, often in shifts, which makes it difficult to upbringing and supervision of children.

A tendency to a better life forces giving large debts with human energy and less time to rest. The rapid development of civilization makes a person does not have much time, not nourished rationally. For such human needs negatively operating agri-food industry, which in pursuit of the biggest profits often used for food production cheapest - low quality ingredients. Improper eating indirectly affects human health, and such behavioral patterns are following the children and young people, which leads to obesity. The negative effects of improper eating habits are visible many years later, sometimes even after exceeding the age of 40.

### **PURPOSE OF THE WORK AND RESEARCH QUESTIONS**

The aim of this study was to assessment state of knowledge of children and teenagers concerning dangers of life and human health.

The study erected following research questions:

1. What are some contemporary threats for human life?
2. What are some contemporary threats for human health?
3. Is the sport can be a threat for human health and life?

### **MATERIAL AND METHODS**

Studies have been done in the month of February 2017 three randomly selected schools of the city of Katowice. Total study involved 83 male and female students of primary school classes IV-VI (including 40 boys and 43 girls), 79 middle school students of classes I-III (including 41 boys and 38 girls) and 80 students technical school and secondary school classes I-III (including 52 boys and 28 girls).

The questionnaire was developed by the authors of this work and fulfill the standards and rules for constructing the research questionnaire [7].

The questionnaire, which was completed the students were anonymous, filled with auditory method. Time to complete response was 25 minutes. The questionnaire, which filled students concerned the following issues:

- metrics of tested person
- knowledge state of tested person about contemporary threats to human health and life
- state of knowledge of respondents on the presence of risks for human life and health of sport.

After the test results collected were subjected to statistical analysis and descriptive [1].

### TEST RESULTS

Setting targets contained in the research first identified the main threats to human life and health and the risks in this aspect related to sports activities. The results in the designated research groups are presented in Table. 1- 12.

**Tab. 1. Today's threats to life - Opinion of primary school students**

PRIMARY SCHOOL - MODERN THREATS TO LIFE					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Car accidents	30	75%	Drugs	15	35%
Motorcycle accidents	21	53%	Drowning	12	28%
Bike accidents	18	45%	Car accident	10	23%
The collapse on skates	9	23%	Walking on the road without the reflective elements	8	19%
The collapse on a skateboard	8	20%	Bike accidents	6	14%
Voilence	7	18%	Voilence	6	14%
Drowning under the ice	5	13%	Bike accidents	5	12%
Ride on skates on a frozen pond	4	10%	Poisoning	5	12%
Drowning during bathing	3	8%	Drugs overdose	4	9%
Fall down the stairs	3	8%	Seizures	3	7%
Walking on the road without the reflective elements	3	8%	Rape	3	7%
Poisoning	3	8%	Beating	2	5%
Slipping	2	5%			

**Tab.2. Today's threats to life - Opinion of middle school students**

SECONDARY EDUCATION - MODERN THREATS TO LIFE					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Car accidents	24	59%	Car accidents	14	37%
Beating	10	24%	Taking drugs	8	21%
Hitting pedestrian by a car	8	20%	Beating	6	16%

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SECONDARY EDUCATION - MODERN THREATS TO LIFE					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Bike accidents	8	20%	Hitting pedestrian by a car	5	13%
The accident under the influence of alcohol	7	17%	Sexual harassment	5	13%
Riding without a helmet	7	17%	Alcohol	4	11%
Swimming on an unattended object, eg. In a pond, lake	6	15%	Skiing without a helmet	3	8%
Jumping on the rolls of various public facilities	4	10%	Beating	3	8%
Jumping from the roof	4	10%	Electric shock	2	5%

**Tab.3. Today's threats to life - opinion technical school and high school students**

TECHNICAL SCHOOL AND HIGH SCHOOL - MODERN THREAT TO LIFE					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Road accidents	20	38%	Road accidents	12	43%
Accidents under the influence of alcohol or drugs	13	25%	Car accidents	10	36%
Car accidents	12	23%	Accidents under the influence of alcohol or drugs	8	29%
Motorcycle accidents	9	17%	Drownings	6	21%
Accidents in the mountains	7	13%	Rapes	6	21%
Accidents while skiing	6	12%	Accidents while skiing	4	14%
Bike accidents	4	8%	Thunderstruck	3	11%
Air accidents	3	6%	Motorcycle accidents	2	7%
Failure to comply with safety rules	2	4%	Bike accidents	2	7%

The second question on contemporary threats to human health, students responded:

**Tab. 4. Modern health threats - Opinion of primary school students**

PRIMARY SCHOOL - MODERN HEALTH RISKS					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Smoking	24	60%	Wrong food	14	33%
Drinking alcohol	21	53%	Drugs	12	28%
Beatings	7	18%	Losing weight	8	19%
Taking drugs	7	18%	Beatings	6	14%
Poisoning	6	15%	Eating stale food	5	12%
Eating unwashed fruits and vegetables	3	8%	Car accidents	4	9%
Lack of exercise	3	8%	Medicines poisoning	4	9%
Allergy	2	5%	Lack of hygiene - dirty hands	3	7%
			Allergy	2	5%

**Tab. 5. Modern health risks - Opinion of middle school students**

SECONDARY EDUCATION - MODERN HEALTH RISKS					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Smoking	16	39%	Smoking	18	47%
Drinking alcohol	14	34%	Drinking alcohol	12	32%
Beatings	8	20%	Losing weight	8	21%
Taking drugs	8	20%	Rapes	8	21%
Eating unwashed fruits and vegetables	6	15%	Lack of exercise	2	5%
Lack of exercise	4	10%	Attack wild animals - rabies	2	5%
Spending too much time on the computer	4	10%	Spending too much time on the computer	1	3%
			Fall from the horse	1	3%

**Tab. 6. Tab. 6. Modern health risks - opinion technical and high school students**

TECHNICAL AND HIGH SCHOOL STUDENTS – MODERN HEALTH RISKS					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Drinking alcohol	27	52%	Drinking alcohol	18	64%
Smoking	20	38%	Losing weight	13	46%
Taking doping	15	29%	Taking psychoactive substances	12	43%
Unhealthy eating	13	25%	Taking drugs	10	36%
Unhealthy lifestyle	12	23%	The sexual abuse	8	29%
Taking psychoactive substances	10	19%	Rapes	7	25%
Taking „soft” or „hard” drugs	9	17%	Unhealthy lifestyle	7	25%
The excess of movement	8	15%	Casual sexual contacts	6	21%
Casual sexual contacts	7	13%	Unhealthy food	5	18%
Unhealthy sleep	6	12%	Mental tension - high expectations of parents and teachers	5	18%
Losing weight	5	10%	Lack of exercise	5	18%
Mental tension - high expectations of parents and teachers	5	10%	Sleep disorders	3	11%
Junk food	4	8%	Doping	2	7%
lack of exercise	4	8%			
Long time working with computers	4	8%			

On the third question - "Is sport can be life threatening?" - Primary school students answered:

**Tab. 7. Threats to life caused sports activities - Opinion of primary school students**

PRIMARY SCHOOL - RISK TO LIFE CAUSED SPORTS ACTIVITIES					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Extreme sports	9	23%	Drowning	9	21%
Drowning	8	20%	Falls	7	16%
Climbing in the mountains	7	18%	Extreme sports	6	14%
Making a dangerous exercise	6	15%	Accident on skiing (without a helmet)	5	12%
Parachute diving	5	13%	Heart attack	4	9%
A man can lose his life if he lack the strength, eg. long time runs	4	10%	Jumping into the water at unguarded waters	4	9%
Too much exercising and a little rest	4	10%	Too strenuous effort	3	7%
Bungee jumping	4	10%	Skating on the pond	3	7%
Death in boxing fight	3	8%	Hit on the head	2	5%

**Tab. 8. Threats to life caused sports activities - Opinion of middle school**

MIDDLE SCHOOL – RISK TO LIFE CAUSED SPORTS ACTIVITIES					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Drowning	10	24%	Drowning	12	32%
Extreme sports	8	20%	Falls	9	24%
Accidents on skiing	7	17%	Extreme sports	5	13%
Too much effort can kill sportsman	4	10%	Accidents on skiing	4	11%
The faulty equipment	4	10%	Mountain climbing - falls, frost-bite and freezing to death	4	11%
Jumping into the shallow water	4	10%	Falls from horse	3	8%
Sport can be life threatening when the sportsman overestimate their skills	3	7%	Parachute diving	1	3%

**Tab.9. Threats to life caused sports activities - opinion technical and high school students**

TECHNICAL AND HIGH SCHOOL – RISK TO LIFE CAUSED SPORTS ACTIVITIES					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
The collapse during exercise can cause death sportsman (skiing, skating, cycling)	12	23%	The falls during sports	7	25%
Extreme sports	7	13%	Drowning	5	18%
The faulty equipment	6	12%	Extreme sports	5	18%
A man may be tired and therefore does not assess accurately his capabilities	5	10%	Alpinism	4	14%
Martial Arts, boxing	5	10%	Bungee jumping	3	11%
Illegal doping can lead to addiction and death	4	8%	Jumping into the water	3	11%
Car races	4	8%	Paragliding	2	7%
Mismatched equipment	3	6%	Martial Arts	2	7%
Sunstroke	2	4%	Boxing	1	4%

**Tab. 10. Health hazards caused by playing sports - Opinion of primary school pupils**

PRIMARY SCHOOL - HEALTH HAZARDS CAUSED SPORT ACTIVITIES					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Extreme sports	8	20%	Accidents skiing	8	19%
Players are often injured	4	10%	Tension, muscle rupture	5	12%
Heart attack while running	4	10%	Accidents skating	5	12%
Torn muscle	4	10%	Martial arts	4	9%
Improper exercises	4	10%	Accidents on the bike	4	9%
The possibility of falling and fractures the spine	3	8%	Accidents skating	4	9%
			No warm-up - causing injuries	3	7%
			Accidents on a skateboard	3	7%
			Faulty sports equipment	2	5%
			Rock climbing	2	5%

**Tab.11. Health hazards caused by playing sports - Opinion middle school students**

SECONDARY EDUCATION - HEALTH HAZARDS CAUSED SPORT ACTIVITIES					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Doping	14	34%	Accidents skiing - bruises, fractures, sprains	8	21%
Extreme sports	13	32%	Doping	7	18%
Falls	10	24%	Sprain ankle or knee	5	13%
Bruises	10	24%	No-warm muscles	4	11%
Sport is associated with injury	9	22%	Boxing - head injuries	3	8%
Martial Arts - bruises	9	22%	Injuries	2	5%
Untreated injuries cause various complications	7	17%			

**Tab.12. Health hazards caused by playing sports - opinion technical and high school students**

TECHNICAL AND HIGH SCHOOL - HEALTH HAZARDS CAUSED SPORT ACTIVITIES					
BOYS	Number of answers	Response rate	GIRLS	Number of answers	Response rate
Doping	22	42%	Doping	7	25%
The falls during sports	19	37%	Złamanie kości	5	18%
Broken bones	10	19%	Exhaustion - Loss of consciousness	4	14%
Twisting the knee or ankle	8	15%	Head injuries - concussion	3	11%
head injuries	7	13%			
Poorly made technically exercise	5	10%			
spine injures	4	8%			
The weakening of the body	3	6%			

The questionnaire causes that can lead to loss of life, in the opinion of respondents primary school to car accidents in boys: 75% of answers and stimulants in girls: 35% of the responses. In high school car accidents indicated 59% of boys and

14% girls. In high school (secondary schools, technology) traffic accidents indicated 38% of boys and 43% girls.

In terms of health risks in primary school smoking cigarettes indicated 60% of the surveyed boys and malnutrition 33% of girls. In high school the greatest threat indicated cigarette smoking 39% of boys and 47% girls. In high school, the greatest threat polling recognize alcohol consumption 52% of boys and 64% girls

In terms of risks to human life caused by sporting activities in the primary school it was extreme sports, boys 23% of responses and drowning 21% of the responses of girls. In high school the most dangerous respondents recognize drowning 24% of responses in boys and 32% of girls. In high school, the most dangerous respondents recognized downs during exercise 23% of the responses in boys and 25% girls.

In terms of health risks resulting from the fact that sports the most dangerous respondents in elementary school recognized extreme sports 20% of responses in boys and accidents on skis 19% response rate in girls. In high school the most dangerous was cheering for boys 34% response and accidents on skis 21% response rate in girls. In high school, the most negative impact on the health of doping was 42% of responses in boys and 25% of responses in girls.

The results of the survey showed that most of the threats to human life and health is associated with traffic accidents, as well as with their own irresponsible behavior. Much more broadly, students describe a health hazard as daily life and health risks as a result of sports. Students recognized as the most adverse effects on health are: unhealthy nutrition, doping, smoking and alcohol consumption.

Taking the above into account in this part of the study authors, based on the analysis of literature show characteristics of these threats:

### **HEALTH AND NUTRITION**

Proper nutrition - healthy is needed to man at any age, but is especially important in the development of children and youth.

Gladly be taken by children and adolescents physical effort, forcing the body to compensate for energy expenditure, which is an additional burden for the body, which is in the stage of growth and development, we strive to maintain homeostasis and the need ingredients to build the body.

The basis for proper nutrition is to determine the energy balance and thus daily energy expenditure compared to the amount of calories consumed. The easiest way to assess this relationship is weight control weight, which examines both the body: lean body mass, percentage of body fat, hydration.

Weight gain usually indicates a positive energy balance, which is associated with increased body fat, and increase body mass while reducing body fat is a result of increased physical activity and changing dietary habits. Standing negative energy balance leading to a decrease in strength through the use of amino acids contained in muscle.

Proper diet aimed at reducing body fat levels should be based on the consideration of the right balance of carbohydrates, proteins and fats. It is recommended that meals to their daily intake consider the following proportions of ingredients:

- carbohydrates from 60% to 70%
- Protein from 15% to 20%
- Fats from 15% to 20%

The important factor the use of a balanced diet is to reduce caloric intake by 250-500 calories a day [4].

Carbohydrates are the only components of the diet that is the source of energy are quickly digested by the body, they are also preferably absorbed and quickly burned.

"Athlete organism can store 400-1000 grams of glycogen which 300-900 grams per muscle and 50-100 grams of liver. In addition, about 10 grams of carbohydrates as glucose's circulatory system. Muscle glycogen is the "fuel" for muscles, liver glycogen and serves to maintain a relatively constant concentration of glucose in the blood "[4 - p. 284].

Glycogen in the muscles exhausted after two or three hours of exercise at an intensity of 60% - 80% VO<sub>2</sub>max. Even faster glycogen runs out during sprints or exercise performed at high intensity.

Proteins are components that are involved in the process: development, growth and regeneration affect the metabolic processes, and are an ultimate source of energy.

Supplied in the diet of protein suppress the effects of the structural protein catabolism that occurs during muscle work. It is estimated that the optimal intake of protein should amount to 1.2-1.6 g / kg of total intake per day.

Now the question is whether it is right to crossing the recommended values?

Excessive intake of protein in quantities that exceed the physiological needs of the body trigger the body's processes of deamination. Through this process, proteins may be oxidized and used as an energy source. The end result of this process is the production of urea, which is utilized by the liver and kidneys, the use of high protein diet significantly burden the authorities.

Another effect occurs when excessive protein intake is increased filtration occurring in the kidney, combined with the loss of substantial amounts of water and calcium.

A high protein diet may also lead to impairment of the nervous system, resulting in an invalid transport of amino acids into nerve cells and the synthesis of the neurotransmitter unstable. In addition, a combination of ammonia with an acid, glutamic impairs glucose transport and keto acids that are the basic fuel nervous system.

Products of metabolism of proteins also cause excessive acidification, which in turn disturbs the acid-base balance.

Fats supplied with food during their decomposition deliver more than twice as much energy than other sources of food, but their large intake excessively burden the liver in humans. Fats are essential building blocks of tissue, they accelerate the metabolism of organic liquids and support the nervous system.

Fats that are in liquid are called oils, some of which contain omega 3. Omega 3 are beneficial for human health, as they help reduce the effects of previously accu-

mulated fat and cholesterol. Cholesterol, a component of the fat is also produced by the body occurs in the nervous system, brain, liver and blood. "The body uses it for the production of sex hormones, adrenal hormones, vitamin D, and bile, which is required for proper digestion of fat." [5 p. 198]

Increased levels of cholesterol carried in time to atherosclerosis, myocardial infarction and blood clots. For most products rich in cholesterol and fat include eggs, chicken liver, beef liver and butter. However, some fish such as cod, halibut, haddock have the lowest content of saturated fat and cholesterol. A practical way to reduce cholesterol levels is to reduce the amount of food products of animal origin for food products of vegetable origin. To lower cholesterol and blood fat effectively contribute to vitamin E, C, niacin, and lecithin.

Beneficial to health is also eating bread with cereals least processed rye, quinoa, amaranth and oats.

It is important in properly laid fat diet is to choose foods rich in omega 3, which include: flaxseed, hemp seeds, chia seeds, rape seeds and pumpkin. The diet should take into account the intake of kale, parsley and savoy cabbage.

When using a well-balanced diet, additional supplementation should be used occasionally.

From the point of view of increased physical effort it is advantageous to the consumption of vegetables and fruit rich in vitamins D, E, and C containing calcium and iron. A common case of errors nutrition in young people, but also adults is to eat high-energy food with a small amount of fiber, which makes it difficult digestion and elimination of food. The use of additional vitamin supplementation can lead to stimulation of the nervous system and affect the characteristics of psychomotor performance.

#### What affects the feeling of hunger?

The mechanism regulates hunger pancreas. This body produces insulin. The decrease in blood sugar levels is a signal to the consumption of a meal. An important role in maintaining proper blood sugar has a glycemic index.

The glycemic index shows the impact on blood sugar are consumed in food carbohydrates. Foods with a high glycemic index are quickly digested and quickly penetrate into the bloodstream, which is growing rapidly blood sugar levels. The human body is preferred consumption of products whose glycemic index is low, causing the release of energy from food in the digestive process does not result in a sudden increase in blood sugar levels and helps keep the feeling of satiety.

Another threat to human health and life, which indicate in questionnaires students is the phenomenon of doping and supplementation

One of the features which characterize young people are curious to know new things and often things forbidden. Omnipresent race the world and the cult of the body like never before on such a scale leads young people to reach for measures illegal and harmful to health, which also can include supplementation.

But what exactly is doping? According to the International Olympic Committee (IOC) – this is a "use of the substance or method which can potentially be detrimental to the health of the athlete" [2, p. 976], and may improve the results. The

proof of doping can be detected in the body tested athlete banned substances, or that they were used previously.

Consuming large amounts of supplements can cause adverse reactions on the part of the digestive system, which can mean different results than expected. It is important to eat a variety of supplements during training and observation of your body on their performance. Proper selection of supplements will assist the athlete during the competition, extending the duration of high-intensity exercise, but the body will be accustomed to such assistance and the effects of this disorder is the natural functioning.

Important factor in the consumption of supplements is also the consumption of probiotics, which restore the proper microbial balance in the intestines and strengthen the immune system.

Supplements affecting the level of health can also include antioxidants: alpha-lipoic acid, vitamins C and E, coenzyme Q-10.

Alpha-lipoic acid occur naturally in humans, animals and plants. As a coenzyme supports the conversion of pyruvic acid, and the Krebs cycle [8].

It should also be noted that the increased supplementation with vitamin C did not lead to increased iron absorption, which in turn leads to hemochromatosis [4].

Coenzyme Q 10 is often called a vitamin-like substance. Its role is to support the process of mitochondrial oxidative phosphorylation. The coenzyme may be present in mitochondria under aerobic conditions in the oxidized quinone-form or anaerobic conditions as a form of hydroquinone. The concentration of coenzyme Q 10 significantly affects the rate of ATP production. Physical efforts activating aerobic energy metabolism damages the function of antioxidant coenzyme Q 10. Taking part in the functioning of the cell mitochondria coenzyme Q 10 is also involved in protein synthesis and lipid metabolism, burning fat for energy form. It was also found that the coenzyme Q 10 improves the functioning of the heart, lower blood pressure and prevent the aging process [5].

A dietary supplement is often carnitine, this agent in food products is in the form of L-carnitine. Large amounts of it can be taken by eating red meat and dairy products. The main role of L-carnitine in the body is to transport fatty acids across the mitochondrial membrane. Practically the entire contents of L-carnitine in the body is present in human muscle. The highest concentration of L-carnitine can be found in meat, mutton and fruits avocado. The role of L-carnitine is the processing of fatty acids into energy used by the cells of the tissue and, indirectly, increase the activity of certain oxidative enzymes.

L-carnitine as a dietary supplement can be used by individuals wishing to reduce body weight and body fat without losing muscle mass and strength. It is recommended that 6-8 grams of L-carnitine on an empty stomach, 30 minutes before training and after its completion [8].

HMB beta-hydroxy - beta - methylbutyrate

It is a derivative of leucine. In its impact on the body is conducive to: increase muscle mass, reduce body fat, increase in muscle strength and anaerobic power. HMB concentration in human plasma is an average of 4 mol / liter, and may rise to 20-25 mol / l to the adoption of one gram of HMB three times a day.

### **PROHIBITED SUBSTANCES - CONSIDERED DOPING**

The most harmful to health can be those substances that were deemed incompatible with a set of anti-doping rules, which in the literature is called the World Anti-Doping Code. The provisions of this Code are considered by WADA, IOC, international sports federations, the International Paralympic Committee, National Olympic and Paralympic Committees, organizers of international sports events and national anti-doping organizations.

The main objective of the organization WADA is: to guarantee fair participation free from unlawful competition support, health promotion, as well as effective prevention of doping in sport. WADA Code contains a list of substances and methods prohibited in sport, an international standard for research and laboratories, the international standard for therapeutic use exemptions, and the international standard of protection of privacy and personal data.

The list of prohibited is updated and announced on [www.wada-ama.org](http://www.wada-ama.org) [8] and its validity shall enter into force on the date of publication of 1 January each year. In special cases, the athlete may accept due to their health medications or preparations banned, but must on this occasion to obtain the consent of the national anti-doping organization in the country of his nationality only for the drug for therapeutic purposes. [TUE Therapeutic Use Exemption]

In the following part of the study - an analysis on the sport and to identify risks arising from this activity.

The practice of sport involves two types of threats: threats and direct danger distant in time. The practice of sport is related to the display of the body in the direction of his biological limits. Sport competition forces the man to take the fight either with itself or with the enemy. Most sports injuries can be seen in contact sports and disciplines in which there is an increased risk of falling. The most common causes of sports injuries are due to: the exhaustion of energy reserves, poor motor coordination, incorrect assessment of the situation dangerous tendency to overestimate their own skills, poor construction of osteo - articular - muscular, underdeveloped level of balance, underdeveloped level of strength and endurance, lack of skills for safe fall, using poorly fitted or faulty equipment.

For an athlete can also affect external factors: a large psychological burden associated with competition in training and sports competition, creating pressure on the side of the coach, parents, lack of proper rest and relaxation, the need for the integration of learning and training classes. Collision with each of these factors can lead to premature burn-out and retire. Such factors can include: high requirements set by the same player, the high requirements that are the result of external pressure, especially by the parents desire to succeed at all costs, lack of ability to put up with setbacks, monotonous hours of training, training the better of each other players and use the same very high loads, the attitude of the coach, frequent trips to competitions and grouping, the use of a restrictive diet or the use of a very rich diet with reduced levels of testosterone in the blood.

In a further analysis of the risks in the opinions of respondents drew attention to the use of readily available drugs.

### SMOKING TOBACCO

Cigarette smoking, but smoking of cigars and cigarillos, light cigarettes and pipes is a cause of many diseases. Among the most common are: the airways, lung cancer (90% men, 79% women), obstructive pulmonary disease, pneumonia, bronchial pneumonia, coronary heart disease, blood clots peripheral vascular disease, hypertension, and cerebro vascular aneurysm [6].

Particularly large health complications in smokers smoking causes around the esophagus, cardia of the stomach and pancreas. Smoking more than two packs of cigarettes per day affects the normal functioning kidneys, urinary tract and the uterus in women. Smokers have observed a significant increase in the incidence of oral cancer than nonsmokers. This cancer is more common in men than women, probably due to the fact that men smoke more cigarettes and for an extended period of his life - early initiation.

Smoking, chewing tobacco also cause changes in the lips, gums and teeth, made the slow degradation of vision in the form of lens opacity, macular degeneration or glaucoma. In addition, cigarette smoking affect the color change on the skin, significantly speeding up the aging process, which is particularly pronounced in women. Smoking in women lowers fertility, adversely affect the course of pregnancy, since cigarette smoke can easily pass through the barrier, which is the placenta. It was observed that women firing considerable quantity of cigarettes result from abnormalities of the menstrual cycle and ovulation, as a result of disturbances in the secretion of the hormones estrogen, progesterone and pituitary and adrenal glands. Smoking greatly increases the risk of miscarriage, baby limits its growth and development and, consequently, the weight and length of the body. The impact of passive smoking by the child manifests itself often changes in physical development, reduction of intellectual ability and impaired emotional child.

### ALCOHOL CONSUMPTION

Alcohol is a component of many products: beer, wine, vodka, cognac, spirits. It is used in the confectionery industry. The concentration of alcohol ranges from a few percent in the beer to over 95% in alcohol.

Alcohol is toxic to man, disrupting the operation of the central nervous system. Initial booster effect of alcohol is converted to a depressing effect with increasing concentration of alcohol in the blood. Alcohol interferes with the body's energy balance by providing more than 7 kcal / g of alcohol consumed. Alcohol consumption along with a normal diet may be the cause of a significant body fat and liver. In contrast, alcohol consumption and the use of poor diet can lead to malnutrition and lack of vitamins and trace elements.

Other adverse effects of alcohol include:

- Liver damage via generation of oxidative status
- Increased fatty acid synthesis leading to fatty liver
- Establishment of acidosis by affecting acid-base balance

- Increasing the impact of many drugs, including sleeping pills, sedatives, psychotropic, anticoagulants, antidepressants, insulin, and monoamine oxidase inhibitors.

Any alcohol consumption causes poisoning of the body. Poisoning light is observed at size of from 0.5 ‰ to 1.5 ‰, it causes a slight impairment of vision and movement coordination, reaction time is increased. Moderate poisoning occurs when a blood alcohol concentration ranging from 1.5 ‰ to 3.0 ‰. Followed by the significant impairment of vision and coordination, reaction time is apparently extended, followed by slurred speech. Severe poisoning occurs after reaching from 3.0 ‰ to 5.0 ‰ blood alcohol, motor coordination is very disturbed, there are large muscle tension, convulsions and loss of consciousness. The concentration of alcohol in the body than 5.0 ‰ leads to death [6].

### CONCLUSIONS

1. Pro-health students knowledge is correlated with their stage of development
2. The biggest health risks in the opinion of the young people should be seen: in traffic accidents, alcohol use, smoking and unhealthy nutrition issues
3. Aspect risks concerning the drinking of alcohol among young people is hardly recognizable
4. Examination of the students using the questionnaire appears to be justified, because it reflects contemporary issues of children and youth.
5. Interesting observations arise from a number of written responses to the questionnaire, they inform that the threat to life and health may be the Internet and unidentified people looking for new friends. This issue must be dealt with in further studies of the threat to life and health of young people.

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#### ABSTRACT

The aim of this study was to assess the knowledge of young people in different age school on contemporary threats to human life and health. The study involved 242 students, including 109 boys and 133 girls aged 11-18 years. The study used a method of diagnostic survey - a questionnaire. The analysis of questionnaires revealed a diverse knowledge of the young people about contemporary threats to human life and health. From the data analysis it can be stated that there is a need for ongoing health education in the studied issues of social life.

#### STRESZCZENIE

Celem pracy była próba oceny wiedzy młodzieży w różnym wieku szkolnym, dotycząca współczesnych zagrożeń dla życia i zdrowia człowieka. Badaniami objęto 242 uczniów, w tym 109 chłopców i 133 dziewcząt w wieku 11-18 lat. W badaniach zastosowano metodę sondażu diagnostycznego – kwestionariusza ankiety. Wykonana analiza ankiet wykazała zróżnicowaną wiedzę badanej młodzieży dotyczącą współczesnych zagrożeń dla życia i zdrowia człowieka. Z analizy danych można stwierdzić iż istnieje konieczność prowadzenia permanentnej edukacji zdrowotnej w badanych kwestiach życia społecznego.

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