

and respondents also believe that smoking will have a bad effect on future children. The problem of smoking currently represents a branched complex of social pathologies that affect the normal functioning of society. The problem is as old as the world, but more relevant than ever. Along with medical and social workers, the state civil society and various public institutions are involved in solving this problem. One of the ways to overcome this problem is effective prevention and promotion of a healthy lifestyle; clear examples of the social and medical consequences of smoking also effectively influence the consciousness of young people. Today, the role of the state in solving the problems of tobacco smoking is increasing, especially youth smoking, which is now gaining momentum as one of the main threats to the entire nation. The problem of female smoking, which undoubtedly affects the demographic situation in the country, continues to remain unresolved. The problem of smoking is extremely urgent for our country. As you know, it is easier to prevent a disease than to treat it, therefore, in addition to treating the disease, which is currently not effective, it is necessary to eradicate the causes of this problem. A relatively simple way out of this situation could be a radical increase in prices for tobacco products, which would reduce their availability, or the removal of cigarettes from shelves and display cases altogether. Today, the problem of smoking is unresolved both in the world and in Ukraine. Now in Ukraine there are more than 3 million teenagers who smoke, which takes this problem from being a private, local problem to a state problem. The problem of smoking among young people has long turned into a large-scale medical and social threat to the Ukrainian nation. Thus, to summarize, we can say that the goal of this work was achieved: the problem of student smoking was studied. In addition, all the tasks were solved: scientific literature was analyzed regarding the social problems of modern youth and the definition of youth as a special social group. The characteristics and causes of smoking among young people were examined. The opinion of young people regarding smoking was also studied. As the study showed, the attitude of young people towards smoking is either neutral or negative, which makes one hope for the best.

The relevance of the research topic is due the fact that tobacco smoking is taking on increasingly threatening forms, significantly deforming the moral, physical, and mental health of the younger generation, which causes enormous damage to the ethnic group as a whole. What makes the problem particularly acute is the fact that it is in adolescence that smoking becomes one of the first forms of deviant behavior, which is subsequently combined with alcohol, and in some cases, drugs. Formed in adolescence, this risk factor continues to operate into adulthood, contributing to the overall deterioration of health. Thousands of people become victims of this slow and silent, but completely merciless killer. Tobacco causes 6% of all deaths in the world. Every 10 seconds, another person in the world dies as a result of tobacco use. With mass distribution, smoking becomes a socially dangerous phenomenon. After all, smokers poison the atmosphere, increase the concentration of carcinogenic substances in the air, and lead to an increase in fires in everyday life, at work and in the forest. Non-smokers are literally forced to breathe in the "exhaust gases" of smokers.

To reduce smoking, many different measures can be used, including strictly limiting smoking areas, fines, laws for complaints from non-smokers, and government medical institutions specializing in the treatment of this type of problem. Speaking of helping non-smokers, we can offer free treatment and sanatorium holidays to those suffering from allergies to tobacco and from contamination of the body with cigarette smoke products. Health authorities in the territories need to assess the objective situation and seek funding from local budgets. But all this requires a revision of both the economic and social policies of the state in which we live.

Reference

1. Blake KD. Smoke-free and tobacco-free colleges and universities, *Tobacco Control*, 2019-29 – 30p.
2. Villanti AC. Preventing smoking progression in young adults: The concept of Prevalence escalation. *Prevention Science*, 2019-377–384p.
3. Procter-Scherdtel A. Social norms and smoking bans on campus. *Health Education Research*, 2018-101–112p.
4. Shcherbina V.A. Application of innovative technologies of physical education for the formation of a healthy image and lifestyle of technical university students. M.: Publishing house, 2007. 319 p.

DOI: [https://doi.org/10.31392/UDU-nc.series15.2024.1\(173\).04](https://doi.org/10.31392/UDU-nc.series15.2024.1(173).04)

Novytskyi Y.
PhD, Associate Professor at the department of health and sports technologies, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" Kyiv, Ukraine.

Sabirov O.
Candidate of Pedagogical Sciences, Associate Professor at the department of health and sports technologies, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" Kyiv, Ukraine.

Luskan O.
Senior Lecturer at the department of health and sports technologies, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" Kyiv, Ukraine.

THE INFLUENCE OF RATIONAL NUTRITION ON THE HEALTH OF STUDENTS

Nutrition is the most important component of human health. All vital functions of the body are closely related to nutrition. Now everyone talks about the dangers of overeating, but both excess nutrition and undernutrition are wrong. Both are equally harmful to people's health. The problem of rational nutrition is very relevant these days. Improper diet is the first cause of diseases of the digestive system. The majority most of the population neglects their health. Lack of time, incompetence in matters of food culture, the pace of modern life - all this has led to indiscriminate choice of products. We are concerned about the growing

popularity among students of fast-food products containing large quantities of various flavors, dyes, and modified components. Therefore, poor nutrition becomes a serious risk factor for the development of many diseases. Unfortunately, statistics in recent years show a sharp increase among young people in people suffering from obesity, diseases of the cardiovascular system, and diabetes. Such diseases can be prevented by leading a healthy lifestyle and, first, eating right. Modern science convincingly proves that by changing the nature and diet you can positively influence all systems and processes in the human body, increase your immunity, vital activity, influence many diseases, and slow down the aging process. Poor nutrition is the main source of many problems of modern man and short life expectancy. Thus, the purpose of the work is: to study the principles of rational nutrition of students, to study the degree of awareness of students about the need to adhere to the rules of rational nutrition in everyday life, to conduct a social study to study the characteristics of nutrition and eating behavior of students [2].

Key words: students, habit, nutrition, diet, immunity, health.

Новицький Юрій, Сабіров Олександр, Лускань Олег. Вплив раціонального харчування на здоров'я студентів. Харчування є найважливішою складовою здоров'я людини. З харчуванням тісно пов'язані всі життєво важливі функції організму. Зараз скрізь йдеться про шкоду переїдання, але неправильним є як надлишкове харчування, так і недоїдання. І те й інше однаково шкідливо відбивається на здоров'ї людей. Проблема раціонального харчування є дуже актуальною в наші дні. Неправильний режим харчування – це перша причина виникнення хвороби травної системи. Більшість населення із зневагою ставиться до свого здоров'я. Нестача часу, некомпетентність у питаннях культури харчування, темп сучасного життя - це призвело до нерозбірливості у виборі продуктів. Турбує зростання популярності у студентів продуктів харчування швидкого приготування, що містять у великій кількості різноманітні ароматизатори, барвники, модифіковані компоненти. Тому неправильне харчування стає серйозним чинником ризику багатьох захворювань. На жаль, статистика останніх років показує різке збільшення серед молодих людей осіб, які страждають на ожиріння, захворювання серцево-судинної системи, цукровий діабет. Запобігти таким захворюванням можна, якщо вести здоровий спосіб життя і, в першу чергу, правильно харчуватися. Сучасна наука переконливо доводить, що змінюючи характер і режим харчування можна позитивно впливати на всі системи та процеси в організмі людини, підвищити його імунітет, життєву активність, впливати на багато захворювань, уповільнити процес старіння. Нераціональне харчування це основне джерело безлічі проблем сучасної людини та малої тривалості життя. Таким чином, метою роботи є: вивчення принципів раціонального харчування студентів, вивчення ступеня обізнаності студентів щодо необхідності дотримуватися правил раціонального харчування у повсякденному житті, проведення соціального дослідження з метою вивчити особливості харчування та харчової поведінки студентів [2].

Ключові слова: студенти, звички, харчування, дієта, імунітет, здоров'я.

Formulation of the problem.

The relevance of this work is related to the need to develop in students the skills of rational nutrition and the knowledge that proper nutrition can influence many aspects of a person's life. Our emotions and temperament are often projected into what and how we eat. Rational nutrition is nutrition that ensures growth, normal development, and vital activity of a person, helping to improve his health and prevent diseases. Students should be considered as a professional production group of the population of a certain age category, united by specific characteristics of work and living conditions. Taking these factors into account, it is advisable to separate students into a special group. When assessing the quality composition of students' food, nutritional imbalances in several main components are often revealed - low content of animal proteins, vegetable fats, calcium, ascorbic acid, and thiamine [1].

Analysis of literary sources. To study the problem of poor nutrition among students, many scientists have devoted a lot of time to this problem and conducted relevant studies and surveys. Basch C.E. [1], Deliens T. [2], Ruthig J.C. [3], Smolyar V.I. [4].

Students' bodies are characterized by characteristics determined by age and the influence of study and living conditions. Educational activities require significant neuro-emotional stress; Excitement before and during exams leads to increased blood pressure, heart rate and respiration. Students lead a sedentary lifestyle for a significant part of the day. Their physical activity is low. Only a part of students go in for sports. Changes in the usual way of life have a great influence on the body of junior students. In the body of young people, the formation of several physiological systems, primarily neurohumoral, has not yet been completed, so they are very sensitive to imbalances in food intake. Due to a violation of the diet during their studies, many students develop diseases of the digestive system, called "diseases of the young," as well as hypertension and neuroses.

The following dietary violations were identified among students: 25-47% do not have breakfast, 17-30% eat twice a day, about 10 do not have lunch or have lunch irregularly, about 22% do not have dinner. Rare consumption of hot dishes, including the first course, and late dinner were noted. In accordance with physiological recommendations, the energy requirement of male students is estimated at 2585 kcal, female students - 2434.5 kcal. Proteins account for about 12% of the daily energy value of the diet, and the share of animal proteins should be at least 60% of the total amount in the diet. Fulfillment of this requirement guarantees not only the provision of a sufficient content of essential amino acids, but also their optimal balance in the diet. Fats should make up about 30% of the total energy value of the diet of female students. At the same time, the share of vegetable fats should account for about 30% of their total amount. The daily requirement of students for basic minerals should be provided by the intake of calcium in the body in the amount of 800 mg. phosphorus - 1600 mg, magnesium -500 mg, potassium -2500-5000 mg, iron - 10 mg. To practically implement the principles of a balanced diet, students should strive for a more complete correspondence between the energy value and qualitative composition of actual diets and the needs for energy and nutrients [4].

A special group should include students who came to study from different countries. This is primarily due to the fact that they find themselves in new, unusual conditions to which they need to adapt. The greatest difficulties are associated with climate

change, separation from homeland and family, as well as changes in nutrition (significant changes in the food supply, cooking technology, diet). Differences in energy expenditure were virtually absent when calculating energy expenditure per standard weight (70 kg) person, regardless of racial, ethnic, or region of origin differences. During the examination session, energy consumption is 1.4 kcal/min, virtually no different from energy consumption during the normal educational process. More than 90% of international students use catering facilities.

Students are young people aged 18-26 years, with unfinished processes of growth and formation of the body, therefore, in the complex system of hygienic measures aimed at protecting the health of students, one of the most important places belongs to the organization of their balanced nutrition. A study of the organization of student nutrition in our country and abroad has shown that nutritional disorders manifest themselves in non-compliance with the optimal ratio between the main nutrients in the diet and the diet. The diet of students must be provided with a sufficient number of various vitamins, primarily vitamins C, group B, vitamins A, E, which affect metabolic processes, growth and the physiological state of the body. Minerals such as calcium and phosphorus, which take part in strengthening bone tissue and activating the most important processes of the body, are important in the nutrition of young people. In maintaining the health and performance of students during the day, it is important that the calorie content of the diet corresponds to daily energy expenditure, the distribution of calorie content between meals, the frequency of meals, the time and intervals between meals. For students, the most optimal diet is four meals a day, especially during the holidays and during preparation for exams. During the study period, three meals a day are allowed, but two meals a day and, of course, eating once a day are unacceptable. The last meal is recommended no later than two hours before bedtime. With four meals a day there should be the following distribution of calorie content: first breakfast - 25%, second breakfast - 15%, lunch - 35%, dinner - 25%. It is recommended to include hot dishes for breakfast and dinner. The lunch menu should usually consist of four courses [3].

To eliminate the consequences of a sedentary lifestyle, plant foods that are a source of dietary fiber should be more widely included in the diet. More attention needs to be paid to meeting the physiological needs of students in nutrients that are often deficient, namely vitamins: C, A, B, B2, BB, as well as compliance with the recommended ratios of calcium and phosphorus (1-1.5). Frequent consumption of dishes and products containing a lot of table salt (pickles, smoked meats, marinades, salted fish) should be avoided. Rosehip decoction, green onions, and raw white cabbage should be used as sources of vitamin C. To provide vitamin A, in addition to animal products, it is necessary to systematically consume sources of beta-carotene, such as carrots (with fats). It is extremely important to follow the principles of a balanced diet during exam periods. During this period, it is necessary to increase the proportion of foods containing proteins and vitamins in the diet, which increase the emotional stability of the body. The most important role in maintaining the health of students belongs to compliance with the diet. Meals should be 3-4 times. Particular attention should be paid to breakfast. Breakfast should contain 25 - 35 g of protein, 30 g of fat and 100 g of carbohydrates. It is recommended to include a hot dish of meat, fish or potatoes and vegetables, eggs, cottage cheese, as well as butter, cheese, bread, tea, coffee, cocoa.

The main sources of complete proteins should be animal products. Their share should be 50-60%, preferably about half of them should be milk proteins. Smoked sausages should not be included in your diet, meat should be lean, fish should be lean and unsalted. Half of the fat requirement should be met with butter and vegetable oils (equally divided). You need to limit foods rich in cholesterol. It is advisable to use predominantly black bread (if there are no contraindications). Due to low energy costs, sugar should account for no more than 15% of the total amount of carbohydrates (60-70 g/day), and complex carbohydrates should account for no less than 70-80%. Taking into account the heavy load on the visual organs, it is important to supply the diet with sources of vitamin A and b-carotene (milk, cheeses, fish oil, egg yolk, carrots, sweet peppers, green peas, sea buckthorn berries, rose hips, apricots, persimmons, liver). To regulate cholesterol metabolism and prevent atherosclerosis, it is necessary to include sources of lipotropic substances in the diet: buckwheat and oatmeal, fresh herbs, vegetables, fruits, seaweed, meat. To prevent obesity, you should limit the consumption of high-calorie foods such as candies, chocolate, cookies, cakes, bakery products made from premium and first-grade flour. To increase calcium content, you should include sources such as cheeses. Table salt contributes to the retention of water and metabolic products in the body, so you should limit its amount or consume foods that are sources of potassium that improve the excretion of these substances (potatoes, lettuce, pumpkin, zucchini, beets, oatmeal, dried fruits, especially raisins, dried apricots) [1].

The diet should have an anti-sclerotic, lipotropic, and anti-stress orientation to optimize fat metabolism, reduce blood cholesterol levels, and provide optimal conditions for the normal functioning of the nervous system. For normal functioning of the body, a balanced supply of its main components with food is necessary, namely: proteins, fats, carbohydrates, vitamins, microelements. It is very important that the caloric content of the diet corresponds to the energy expenditure of the body, depending on individual characteristics - such as height, weight, age, and the degree of physical and emotional stress. The diet should be varied and include meat, fish, eggs, dairy products - the main sources of protein necessary for the growth and restoration of cells and tissues of the body and its normal functioning. Fats should make up about 30% of the total calorie intake, and at least a third of the total should be used in the form of vegetable oils; they should be used more widely when preparing salads and vinaigrettes. To improve brain activity, as well as to prevent atherosclerosis, it is necessary to increase the number of fish dishes in the diet. Carbohydrates are the "fuel" of brain cells. Bread, potatoes, sugar, confectionery, cereals, chocolate are their main sources, which, when in excess, turn into fats and are deposited in fat depots [2].

To establish a regular nutrition system for the younger generation, it is necessary to adopt new standards for student nutrition. Students' meals should, firstly, be of high quality, secondly, balanced in the number of proteins, fats, and carbohydrates, thirdly, regular - every four to five hours, and fourthly, more focused on domestic products. Studies have shown that young people prefer French fries, chips, sandwiches, mayonnaise, and carbonated drinks. As a result, teenagers are four times more likely than adults to suffer from obesity problems. Doctors have established the dependence that if a student eats at least three times a day, this has a positive effect on his academic performance. And if once or twice a day, then the grades are satisfactory. How can a healthy, young, growing organism perform normally in classes, tests, and laboratories when it does not have enough strength to do

so? The task of any university is to graduate not only professionally trained, but also healthy, energetic young specialists. In the context of the economic crisis, declining family incomes and student unemployment, as well as rising food prices, it is necessary to develop proposals to improve the nutrition system of our students. On the one hand, commodity producers should be encouraged to reduce the cost of their products, and on the other, the introduction of government subsidies for student meals [3].

Misconception of female students or "the destructive power of diets".

The problem of almost every modern girl is excess weight. So-called "fashionable" diets promise an ideal figure or relief from all diseases in a month. There are many such diets: spectacle, protein, vegetable, cheese, wine, Hollywood, ballet. Girls desperately grab onto each of them in the hope of an appropriate result, and we are not talking about therapeutic diets specially developed and recommended for medical practice. Their peculiarity is that they are designed for a short period of time ("short diets"), as opposed to long-term changes in food intake for life ("long diet"). A huge disadvantage of short diets is that they are based on a sharp restriction in certain types of foods for a certain period. Therefore, only a person with a remarkable will manages to overcome himself, endure the entire diet to the end and not relapse after the diet. Basically, the hardships that a person who uses a short diet endures almost always end in vain. Because strict diets primarily remove water. A person who practices such a diet quickly loses weight and rejoices, thinking that he is getting rid of fat. But that's not true. Fat disappears very slowly but is gained very quickly after a diet. Moreover, as a rule, more weight is gained than before. This is a common feature of short diets. During these diets, the body adjusts to a strict diet, the metabolic process slows down by 10-30%, and calories begin to be burned more slowly. After being on a diet for the allotted time and losing some weight, a person returns to his previous habits. But the body does not have time to adapt to a new way and still burns calories slowly, which leads to a sharp increase in body weight. That is why, according to research from the US National Institutes of Health, 98% of people on diets gain weight above their original weight after stopping. Moreover, as studies have shown, overly determined attempts to lose weight by young girls only increase the chances that over time these girls will become very fat. People who don't try to diet never gain as much excess weight as those who periodically try new diets [3].

There is another factor against short crash diets. Since glucose is the main source of nutrition for the brain, people on these diets have impaired thought processes. Director of the American Nutrition Clinic (Houston), Dr. J. Foreit writes: "Fashionable diets that completely exclude carbohydrates or are based on one type of food, for example, grapefruits or watermelons, can cause problems with concentration and the ability to think clearly on the third day". English psychologists tested 60 healthy women for attention, memory, and reaction speed. Two tests were carried out - the women took the first test after a strict diet, the second test - after a hearty feast. The test results after the diet were 20-30% worse than the results after they had eaten their fill. This allowed us to draw an interesting conclusion - the body perceives diet as stress. But the body knows how to adapt to stress and resists it more and more each time. That is why those who have repeatedly tried a diet to lose weight, over time, notice that over time, using the same diet, each time it becomes more and more difficult to lose weight [2].

Conclusions.

One of the forms of organizing student meals can be youth cafes. Young people who study at food universities could, from the third or fourth year, organize their own personal business in the form of a small business on the territories of higher educational institutions. The main task is to give them this opportunity by providing budget support. The law should spell out mechanisms for the development of a system of youth cafes, restaurants, and snack bars, in which students could not only buy hot lunches at a discount, but also work in their free time from studying.

Proper nutrition and active physical activity are the key to keeping your body in good shape and active. The art of leading a healthy lifestyle is necessary and accessible to every student to improve their health and obtain a worthy profession.

Reference

1. Basch C.E. Healthier students are better learners: A missing link in school reforms to close the achievement gap. J. Sch. Health. 2011-10-13p.
2. Deliens T. Socio-demographics, and health behavior related correlates of academic performance in first year university students. Nutr. J. 2013-20-22p.
3. Ruthig J.C. Changes in college student health: Implications for academic performance. J. Coll. Stud. -5-10p.
4. Smolyar V.I. Principles of rational nutrition. Kyiv, - Dumka, 2009-368p.