# Questions for exam

# “Healthy lifestyle”

### The concept of “health”, the impact of a “healthy lifestyle” on the formation of a healthy population

Health is assessed in various contexts - the full physical health of the body, social well-being, as well as the presence of forms of a full-fledged manifestation of life. Along with this, health is assessed not only in terms of the absence of disease or physical defect, but also in terms of the presence of complete physical, moral and social well-being.

Various indicators affect the state of human health. In order to maintain a good physical shape and remain psycho-emotionally stable, you need to pay attention to the quality of your life in a multifactorial natural and social environment. Human health can be influenced and influenced by various factors: genetics; medicine; ecology: climate, flora, landscape; Lifestyle; physical; biological; chemical. These factors are classified into the following types: social and economic; environmental; hereditary - the presence of diseases, anomalies in the structure of the human body, inherited; medical - providing assistance to the population, the frequency and quality of examinations, disease prevention. They directly affect the well-being of a person. It is necessary to take into account indicators of age, climatic conditions of the area of residence, individual indicators. Data from the World Health Organization indicate that: at least 50% of human health depends on lifestyle; 20% is due to heredity; 20% - on the influence of the external environment; 10% - for health-related factors. The indicator of the influence of lifestyle on human health is of leading importance and amounts to half - 50%. The other half in the aggregate are factors of heredity, environmental influences, health care.

## The concept of "obesity", stages, treatment by stages

Obesity is a disease characterized by excessive accumulation of fat in the body, leading to weight gain. In most cases, obesity develops due to excessive food intake (90% of cases), reduced energy expenditure (a sedentary lifestyle) and metabolic disorders. Obesity affects 50% of Russians, while the number of obese women is three times more than men. The saddest thing is that the remaining 45% are slowly but surely moving towards clinical obesity. Therefore, doctors are increasingly talking about the epidemic of this disease.

Obesity is an increase in body weight by 20% or more of the norm, due to the growth of adipose tissue.

The development of obesity is promoted by: frequent overeating; malnutrition (eating at night, excessive consumption of carbohydrates, fats, salt, soda, alcohol and other unhealthy and unhealthy foods); inactive lifestyle (for example, sedentary work); hereditary predisposition; diseases of the nervous system (damage to the area of the brain that is responsible for eating behavior); diseases of the endocrine glands (tumors, hypothyroidism, hypogonadism); taking certain medications (hormones, antidepressants, etc.); insomnia, stress; physiological conditions (pregnancy, lactation, menopause).

The degree of obesity is determined by the body mass index. Body mass index (BMI) is calculated by the formula: body weight (kg) / height (m) squared. The norm is BMI = 18.5-25 kg / m2. There are the following degrees of obesity.

Preobesity. This degree is characterized by the presence of 25-29.9% of excess weight compared to the norm. It is considered the initial form, the main symptoms of obesity are absent. It lends itself well to correction through proper nutrition and exercise.

Obesity 1 degree. It is characterized by the presence of 30-34.9% of the devoid of weight. Outwardly, this degree is already more pronounced. It is often regarded not as a disease, but as a cosmetic defect. The first signs of obesity begin to appear - swelling, excessive sweating, shortness of breath, etc. This is the stage at which it is necessary to start taking measures to combat excess weight.

Obesity 2 degrees. The presence of 35-39.9% of excess weight. This degree is already expressed even more clearly - significant fat deposits are visible. There are symptoms of obesity, reduced performance and physical activity. With this degree, urgently begin to fight excess weight, because. it can quickly develop into grade 3 obesity.

Obesity 3 degrees. It is characterized by the presence of 40% or more excess weight. This degree is very easy to determine in appearance. At this stage, almost all the symptoms of obesity appear: shortness of breath, even at rest, swelling of the legs, headaches, disturbances in the functioning of the cardiovascular system, etc. It becomes difficult for a person to serve himself. It is urgent to contact a specialist (endocrinologist and nutritionist) and start treatment!

## Rational nutrition, basic principles

**The first principle of rational nutrition is moderation.**

Moderation in nutrition is necessary to maintain a balance between the energy supplied with food and the energy expended in the process of life.

The law of conservation of energy in nature is absolute, it is valid not only for inanimate matter, but also operates in a living organism, including in the cells of human organs and tissues.

Energy consumption in the body is carried out in three ways: as a result of the so-called basal metabolism, the specific dynamic action of food and muscle activity.

Basal metabolism is the minimum amount of energy that a person needs to maintain life in a state of complete rest. Such an exchange usually occurs during sleep in comfortable conditions. It is most often calculated in relation to a "standard" man (age 30, body weight 65 kg) or to a "standard" woman (same age, body weight 55 kg) engaged in light physical labor. The basal metabolism depends on age (in young children it is 1.3-1.5 times higher per unit body weight than in adults), on total body weight, on external living conditions and individual characteristics of a person. It has been established that, on average, about 1 kcal per 1 kg of body weight per hour is expended during the main metabolism. In people who constantly experience physical activity, the basal metabolic rate, as a rule, increases within 30%.

The specific dynamic effect of food is due to its digestion in the human gastrointestinal tract. The greatest energy consumption is the digestion of proteins, which increases the intensity of basal metabolism usually by 30-40%. The intake of fats with food increases the basal metabolism by 4-14%, carbohydrates by 4-7%. Even tea and coffee cause an increase in basal metabolic rate within 8%. It is estimated that with a mixed diet and the optimal amount of nutrients consumed, the basal metabolism increases by an average of 10-15%.

Physical activity has a significant impact on energy consumption in the human body. The more physical activity, the more energy the human body spends. If a person's body weight is more than standard, then energy consumption during these types of activities increases proportionally, if less, they decrease.

The daily energy consumption of a person depends on age, sex, body weight, nature of work, climatic conditions and individual characteristics of the course of metabolic reactions in the body.

With a short-term lack of energy value of food, the body partially consumes reserve substances, mainly fat (from adipose tissue) and carbohydrates (glycogen). With a long-term lack of energy-valuable food, the body consumes not only reserve carbohydrates and fats, but also proteins, which, first of all, leads to a decrease in the mass of skeletal muscles, and, consequently, to the occurrence and development of dystrophy.

A short-term excess of the energy value of food adversely affects the processes of digestibility and utilization of basic nutrients, which is expressed in an increase in the amount of feces and the release of an increased amount of urine. With a long-term excess of the energy value of food, part of the fats and carbohydrates begins to be deposited in the form of reserve fat in adipose tissue. This leads to an increase in body weight and subsequently to obesity.

**The second principle of rational nutrition is variety.**

The population of our planet uses thousands of foodstuffs and even more culinary dishes for food. And the whole variety of food products is made up of various combinations of nutrients: proteins, fats, carbohydrates, vitamins, minerals and water. Naturally, different food products have different chemical composition.

The energy value of the diet depends on its constituent proteins, fats and carbohydrates. Carbohydrates supply mainly energy, while fats and especially proteins not only supply the body with energy, but are also a necessary material for the renewal of cellular and subcellular structures. The use of proteins as an energy material is very unfavorable for the body: firstly, proteins are the most scarce and valuable food substance, and secondly, during the oxidation of proteins, accompanied by the release of energy, incompletely oxidized substances are formed that have a significant toxic effect.

The optimal ratio of proteins, fats and carbohydrates in the diet of a practically healthy person is close to 1:1.2:4. This ratio is most favorable for maximum satisfaction of both plastic and energy needs of the human body. Proteins in most cases should be 12%, fats - 30-35% of the total calorie intake. Only in the case of a significant increase in the share of physical labor, and in connection with this increase in energy demand, the protein content in the diet can be reduced to 11% of its total calorie content (due to an increase in the share of fats and carbohydrates as calorie suppliers).

What is the approximate daily requirement of an adult engaged in light physical labor in the energy value of food, in proteins, fats and carbohydrates? The diet should contain 80-90 g of protein, 100-105 g of fat, 360-400 g of carbohydrates, its energy value should be 2750-2800 kcal.

The optimal ratio of animal and vegetable proteins in the human diet ranges from 60:40 to 50:50 (depending on the quality of vegetable proteins), and averages 55:45.

When determining a person's need for fats, one should take into account the need to fully provide the body with high-grade fatty substances, namely: essential fatty polyunsaturated acids, phospholipids necessary for cell renewal and intracellular components, as well as fat-soluble vitamins.

The consumption of carbohydrates per inhabitant in our country averages about 460 g per day, while in accordance with scientific recommendations, the norm should be 386 g per day. Particularly dangerous for the health of the country's population is the steady increase in sugar consumption, which has exceeded 120 g per day (on average), while the recommended norm is 50-100 g per day (50 g for light physical labor, up to 100 g for heavy physical labor). labor). Sugar is the carrier of so-called empty calories, it does not contain any essential food components. Moreover, sugar contributes to the occurrence and development of dental caries, while another representative of carbohydrates - starch - does not have such an effect. In addition, the consumption of sugar in significant amounts increases the concentration of glucose in the blood, which is a risk factor for the onset of diabetes. At the same time, starch, due to its slower digestion in the digestive tract, does not have such an effect. Therefore, it is recommended to limit the consumption of sugar and confectionery as much as possible and replace them, if necessary, with starch.

A healthy human body needs the so-called plant fibers or ballast substances, which are mainly represented by the membranes of plant cells and consist mainly of fiber and pectin. The optimal intake is 10-15 g of these substances per day, including 9-10 g of fiber and 5-6 g of pectin. Vegetable fibers improve the motor function of the gastrointestinal tract, contribute to the elimination of congestion in the intestines. An inverse relationship has been established between their content in food and the incidence of colon cancer.

Vitamins occupy a special place in nutrition, being its irreplaceable factor. In the distant and even relatively recent past, some groups of the population experienced severe disasters as a result of the development of hypo- and beriberi. Diseases such as scurvy, pellagra, rickets, polyneuritis (beriberi disease), some types of anemia (anemia) and hemophilia (increased bleeding), as well as many others, have repeatedly affected significant contingents of people as a result of a sharp decrease in their food of certain vitamins. At present, thanks to the widespread promotion of medical knowledge, the activities of health authorities and governments in many countries aimed at creating conditions for adequate provision of the population with vitamins, these diseases are relatively rare.

**The third principle of rational nutrition is the mode of eating.**

The diet of a person is usually regulated by appetite. Everyone knows the feeling of hunger, which signals that for the human body to function properly, it is important to get a new portion of food that carries energy, plastic substances, vitamins and minerals spent in the metabolic process. The physiological and biochemical essence of this feeling, also called appetite, has not been fully elucidated. Even the works of IP Pavlov showed that the so-called food center is located in the brain. Excitation of the food center by various impulses (a decrease in the concentration of glucose in the blood, contractions of an empty stomach, etc.) creates appetite, the degree of which depends on the degree of excitation of the food center.

It must be borne in mind that as a result of a certain inertia of excitation of the food center, appetite persists for some time even after eating. This is due to the need for digestion and absorption of nutrients. And only after the beginning of their entry into the blood, the excitation of the food center begins to be replaced by its inhibition.

## Functions of nutrition

Everyone knows that nutrition is absolutely essential to sustain life. Science has firmly established three functions of nutrition.

The first function is to supply the body with energy. In this sense, a person can be compared to any machine that does work, but requires fuel for this. Rational nutrition provides an approximate balance of energy entering the body, expended on ensuring vital processes.

The second function of nutrition is to supply the body with plastic substances, which primarily include proteins, to a lesser extent - minerals, fats, and to an even lesser extent - carbohydrates. In the process of vital activity in the human body, some cells and intracellular structures are constantly destroyed and others appear in their place. The building materials for creating new cells and intracellular structures are the chemicals that make up food products. The need for plastic food substances varies depending on age:

Finally, the third function of nutrition is to supply the body with biologically active substances necessary for the regulation of vital processes. Enzymes and most hormones - regulators of chemical processes occurring in the body - are synthesized by the body itself. However, some coenzymes (an essential component of enzymes), without which enzymes cannot exercise their activity, as well as some hormones, the human body can synthesize only from special precursors found in food. These precursors are vitamins present in foods. Relatively recently, data have appeared on the existence of another - the fourth function of nutrition, which consists in the development of immunity, both nonspecific and specific. It was found that the magnitude of the immune response to infection depends on the quality of nutrition and, especially, on the sufficient content of calories, complete proteins and vitamins in food. With insufficient nutrition, general immunity decreases and the body's resistance to various infections decreases. Conversely, a nutritious diet with sufficient protein, fat, vitamins and calories strengthens the immune system and increases resistance to infections. In this case, we are talking about the relationship of nutrition with nonspecific immunity. Later it was found that a certain part of the chemical compounds contained in food is not broken down in the digestive tract or is only partially broken down. Such large non-split molecules of proteins or polypeptides can penetrate the intestinal wall into the blood and, being foreign to the body, cause its specific immune response. Studies conducted at the Institute of Nutrition of the Russian Academy of Medical Sciences found that a few percent (or a few tenths of a percent) of proteins that come with food are found in the blood, liver and some other internal organs in the form of large molecules that retain the antigenic properties of the original food proteins. It was also revealed that specific antibodies are produced in the body against these foreign food proteins. Thus, in the process of nutrition, there is a constant flow of antigens from the digestive tract into the internal environment of the body, which leads to the development and maintenance of specific immunity to food proteins.

## Physical activity, drawing up an exercise therapy plan for cardiovascular disorders

The following are key points for clinicians to remember about physical activity (PA) and the prevention of coronary heart disease (CHD):

* Physical activity (PA) is an independent and protective risk factor associated with reduced cardiovascular (CV) morbidity and mortality (odds ratio, 0.86; p < 0.0001), and inactivity accounts for 12.2% of the population-attributable risk for acute myocardial infarction (MI) and 6% of coronary heart disease (CHD) case,s with an estimated 0.68-year reduction in life expectancy. Because >40% of the risk reduction associated with exercise cannot be explained by changes in conventional risk factors including lipids, blood pressure, and glucose-insulin, it suggests a cardioprotective “vascular conditioning.”
* Guidelines recommend that clinicians use counseling interventions that include setting specific and short-term goals, providing feedback on progress, advocating strategies for self-monitoring, establishing a plan for frequency and duration of follow-up, using individually tailed interventions based on readiness to change and motivational interviewing, and enhancing patient self-efficacy. PA should include at least 30 minutes of moderate-intensity PA 5 days/week, 20 minutes of vigorous aerobic exercise 3 days a week or combinations, in addition to 2–3 days/week of resistance and flexibility exercise.
* The Exercise in Medicine campaign calls for PA to become standard of practice in health care, encouraging clinicians to evaluate their patients’ PA at every visit and “prescribe” exercise at appropriate “dosages.” Cost-effective nonphysician health coaches, pedometers/accelerometers, mobile applications, and social media provide increasing PA awareness, motivation, and monitoring of exercise progress.
* Exercise-based cardiac rehabilitation (CR) is the cornerstone for secondary prevention of CV disease (CVD). In contemporary exercise-based CR programs, the reported incidence of cardiac arrest and death approximate 1 in 115,000 and 1 in 750,000 patient-hours of participation, respectively. CR comprises several core components, including baseline patient assessment, nutritional and psychosocial counseling, risk factor management, PA counseling and exercise training. In patients with CHD, CR is associated with a 13% and 26% lower all-cause and CVD mortality and a 31% reduction in hospital admissions at 12 months. CR participation is also associated with improvements in CHD risk factors, reduced angina and depression, improved fitness, and enhanced health-related quality of life (QOL). However, in patients with acute MI and who were eligible for CR, only 62.4% were referred to CR at the time of hospital discharge, and only 23.4% of all patients actually attended one or more CR sessions in the year post-discharge. In patients with chronic heart failure (CHF) who are being optimally medically managed, exercise-based CR programs confer an additional 11% reduction in all-cause mortality and hospitalization, a 15% reduction in CV death and CHF hospitalization, and improved QOL.
* Prior to prescribing PA for patients with CHD, physicians should assess the patients’ exercise tolerance. Peak or symptom-limited exercise testing should be considered to establish a baseline fitness level, determine the prescribed heart rate range for training, and evaluate for exercise-induced myocardial ischemia or arrhythmias that may alter ongoing medical management. Recently discharged patients with CHD should be referred to CR for education, counseling and supervision, and monitoring of exercise training. After prescreening is completed to identify those in whom CR should be delayed or prohibited, the general recommendation for patients is 30–60 minutes daily of moderate-intensity PA for at least 5 days of the week and performed at an intensity of 40–80% of the peak heart rate.
* Can too much exercise be dangerous? There is a dose-response relation between exercise and CV-related mortality during long-term follow-up. Regular walking or running were associated with progressively lower CV mortality up to a point, beyond which much of the survival benefit was lost. The least physically active cohorts were at the highest risk for CV and all-cause mortality; and the most physically active subsets (high-intensity exercise at the greatest weekly dosage) were at increased risk of CV mortality as compared with more moderately active individuals. Interval training seems more effective than continuous exercise for the improvement of aerobic capacity in CHD, but additional long-term studies assessing safety, compliance, and morbidity and mortality following interval training are needed. In healthy persons, while “more is not always better,” it is not clear whether “more is actually worse.”

## Smoking, harm to the body (by system)

**How smoking affects the oral cavity**

Tobacco use causes a range of dental diseases and side effects. The consequences of smoking on the part of the oral cavity are as follows:

* change in taste sensitivity;
*  dark brown or black "smoker's plaque" on the teeth;
*  bad breath;
*  gum and periodontal disease (periodontitis);
*  leukoplakia of the mucous membrane (inflammation by the type of keratinization);
* cancer of the oral cavity.

This effect of smoking on the oral cavity is due to the following factors:

chemical - cigarette smoke contains more than 4,000 toxic compounds 5;

thermal - due to high temperature (300°C for smoldering tobacco, 900-1000°C at the time of puffing and 40-60°C for tobacco smoke6), the blood supply to the gums is disturbed, which leads to sclerosis of the vessels and atrophy of the gum tissue.

**The effect of smoking on the respiratory system**

Tobacco tar, consisting of liquid and solid fractions, settles on the walls of the airways, accumulating in the alveoli of the lungs. Some of these compounds come out when coughing along with sputum, and some are absorbed into the tissues and enter the bloodstream.

In recent years, there has been an increase in the incidence of lung cancer against the background of nicotine consumption, due to an increase in the number of not only active, but also passive smokers.

There is a relationship between the frequency of consumption of tobacco products and the development of oncology of the respiratory system. Heavy smokers are 70 times more likely to develop lung cancer than non-smokers.

**The risk of developing cancer due to smoking**

The main harm of tobacco smoking (cigarettes, cigars and pipes) is their ability to cause cancer. This addiction can lead to malignant neoplasms:

*  lungs;
*  lips, tongue and other parts of the oral cavity;
* pharynx;
*  larynx;
*  esophagus;
*  stomach;
*  pancreas;
*  liver;
*  bladder;
* kidneys;
* cervix;
* colon.

In 30-35% of cases, it is nicotine that is the main cause of the development of the above diseases.

**The effect of smoking on the psyche**

*  Norepinephrine (NA) - acts as a stimulant. It determines the level of wakefulness of the brain and is responsible for concentration. NA increases blood pressure, increases heart rate and respiration, which contributes to the working mobilization of the body. That is why smokers believe that cigarettes help them focus better and increase their efficiency. However, without nicotine, smokers begin to experience difficulty concentrating.
* Serotonin is a neurotransmitter responsible for emotional stability. With its lack, a person becomes irritable, feels a lack of positive emotions, and has problems sleeping. Serotonin deficiency can be associated with unexpected and unexplained tears, suicidal thoughts and actions.
*  Dopamine is commonly referred to as the pleasure neurotransmitter. This substance is produced at the moment when a person experiences satisfaction from what is happening. Dopamine is also responsible for good feelings towards other people. With a lack of this neurotransmitter, a person perceives life as bleak and colorless, experiences an inability to love, and does not feel remorse about his own behavior.
* Gamma-aminobutyric acid - a substance that causes a feeling of calm. Lack of GABA leads to free-floating anxiety and panic attacks.

**The effect of smoking on the cardiovascular system**

Smoking and healthy blood vessels are two incompatible concepts. Nicotine increases contributes to the development of such cardiovascular diseases as:

* atherosclerosis;
*  ischemic heart disease (CHD);
* hypertension.

Nicotine causes vasospasm, thereby increasing blood pressure. The walls of blood vessels are damaged, cholesterol plaques are deposited on them. These factors are the main reason for the development of cardiovascular diseases up to myocardial infarction. The blood vessels of the brain of a smoker are also damaged - due to a deterioration in blood supply, memory decreases and the risk of paralysis increases.

## Alcohol, harm to the body (by system)

The active ingredient in alcoholic beverages is ethyl alcohol, in other words, ethanol. In addition to entering the body through alcohol, it is also produced naturally. For example, the metabolism of glucose leads to the appearance of a small amount of ethanol in the blood. This is called endogenous ethanol. Scientists are trying to prove the synthesis of endogenous ethanol through the gastrointestinal tract as a result of carbohydrate metabolism, but so far without success.

Drinking alcohol in any amount affects many processes within the body.

**Digestion**

Alcohol is a high-calorie product, but often people who regularly drink alcohol do not suffer from problems with being overweight. Basically, those who drink at the festive table and with plentiful snacks have problems with it.

Studies have shown that the calories obtained from alcohol are not used efficiently, but increase the metabolic rate. That is, due to these empty calories, hunger grows. This leads to the fact that the process of burning increases and calories do not go into the form of fat, but the appetite grows, provoking cravings for overeating. There is also a connection between love of sugar and alcohol: people who drink often are more indifferent to sugary foods.

**Brain**

Ethyl alcohol is made up of two carbon atoms (C), several hydrogen atoms (H), and a hydroxyl (OH). Penetrating into the body, this substance changes the connections in the brain and affects neurotransmitters. These are biologically active substances involved in the transmission of information and signals between neurons and other cells.

Prolonged concentration of alcohol in the brain destroys the connections between neurons, which can lead to dementia. Having reached the brain, alcohol interferes with the normal functioning of glutamate (it plays an important role in the functioning of the body, as it makes up 25% of all amino acids).

Glutamate is responsible for signaling between other receptors. A low level of glutamate leads to apathy, and a high level leads to overexertion and headache.

With prolonged use of alcohol, the brain develops tolerance to ethanol and sensitivity to glutamate. This is how the withdrawal syndrome, known as the withdrawal syndrome, appears.

**Consciousness**

Due to the inhibition of the GABA neurotransmitters and the obstruction of the work of glutamate, all information in the mind begins to flow slowly. Gamma-aminobutyric acid (GABA) is a group of inhibitory neurons and the exact opposite of glutamate. A high level of GABA guarantees calmness and concentration, and a critically low level leads to attention deficit disorder.

**Memory**

Since alcohol disrupts the normal process of assimilation of thiamine, this can gradually lead to the development of Gaye-Wernicke syndrome (brain damage). Thiamine belongs to the B1 vitamins and enters the body with various foods, but if you consume alcohol and do not follow a normal diet, this will lead to a lack of it and to impaired memory, confusion in thoughts and problems with sleep. It is treated with the introduction of vitamin B1, but if ignored, the syndrome can provoke a coma.

## Methods for quitting smoking and alcohol

Effective experts call methods that make it possible not to smoke for six months. Today, official medicine has proven the effectiveness of two methods. They go first on the list.

MEDICAL CARE

The doctor will help develop an optimal regimen for the time of giving up cigarettes and, if necessary, prescribe drugs to help cope with stress. Everything is scientifically based and suitable for those who prefer official medicine.

PATCHES AND NICOTINE GUM

The way to quit smoking without a nicotine hangover is by patching or chewing gum to deliver a minimal amount of nicotine to your body while you wean from cigarettes. The method is suitable for those who cannot endure the time of removing nicotine from the body. The disadvantages include the fact that then you will gradually have to wean yourself from substitutes.

If you are a smoker with little experience, your degree of nicotine dependence is weak, and you do not want to see a doctor, you can try one of the other methods.

HYPNOSIS OR CODING

The therapist inspires the patient that he no longer wants to smoke - in a state of hypnotic trance or without it. The main thing is that a person still wants to quit smoking and does not smoke for this very reason, and not because of the fear of “breaking the coding”. If after some time a breakdown occurs, it is better to visit the doctor again and either strengthen or remove the received settings. The method is not officially approved.

ACUPUNCTURE

Work with certain points on the body of the disease is treated for more than one millennium. Bad sick habits are no exception. The doctor sticks special needles into the right points on the ears, and the craving for smoking disappears. Usually one to six sessions are required. The method is not suitable for those who faint at the thought of injections. It also cannot be called officially approved.

HARD WORK

Psychologists have recently found that working hard and full of stress can significantly reduce the number of cigarettes smoked. And even quit completely - after all, there is absolutely no time left for smoke breaks with a tight schedule. The effect will be stronger if, for career growth, you choose a company in which smoking is completely prohibited.

SPORT

For those who are attracted to an active lifestyle, it works quite well to replace smoking with some interesting sport or fitness. Moderate and regular physical activity causes a biochemically determined feeling of pleasure. In this state, overcoming your habits is much easier and more pleasant. In addition, sports have a good effect on appearance.

EXPEDITION

You can go kayaking on mountain rivers for a month, wander through the jungle or conquer some impregnable peak. But you will have to choose a completely non-smoking team for this event - such people are found. If there is no one to “shoot” a cigarette, a tough travel regime and heavy physical exertion will soon enough make you forget about tobacco.

ALLEN CARR'S EASY WAY TO QUIT SMOKING

Throwing by the book is very trendy these days, solo and in virtual support groups. The book can be bought or borrowed from those who have already quit. The volume is small, and even a non-lover of the printed word can handle it. Just do not listen to those who say that the book did not help them - your goal is to quit, and not to collect statistics.

This man founded a network of clinics and helped hundreds of people stop smoking. His method is described in the author's work, and in short, it includes two main components:

methods of overcoming the fear of the process of parting with a cigarette;

ways to help come to understand that the pleasure of smoking is a myth.

Most importantly, this method has proven effective, with its help at least 95% of those who want to stop smoking, besides, the system is absolutely harmless to the body.

SINGLE FLIGHT

You can throw away the last pack of cigarettes and go into the wilderness. Downshifting is gradually becoming fashionable. And if the village chosen for living has a tent with tobacco products, then your choice is lonely weather stations in the taiga or a distant cordon of the forestry. If the nearest store is 50 kilometers through the forest, you don’t run away for a smoke once again.

BEYOND INTERVENTION

Everywhere there is a woman Manya or Father Nikolai, who have a large percentage of those who are cured of tobacco addiction. It doesn't matter what the method is based on - weed, whispering over water or prayer. If you believe in these things, they work. “Like a grandmother whispered” is a completely harmless informal method with a 50 percent success rate. That is, either it helps or it doesn't.

## Methods for the prevention of smoking and alcoholism, used by the state

In 2007, WHO created a user-friendly and cost-effective tool called MPOWER to scale up the practical implementation of the core provisions of the WHO FCTC to reduce the demand for tobacco. Each measure in the MPOWER package corresponds to at least one provision of the WHO Framework Convention on Tobacco Control.

The six measures of the MPOWER package are:

1.monitoring tobacco consumption and taking measures to prevent it;

2. protecting people from tobacco use;

3.providing assistance in quitting tobacco use;

4. warning about the dangers of tobacco use;

5. introduction and enforcement of a total ban on advertising, promotion and sponsorship;

6. Increasing taxes on tobacco products.

WHO has been monitoring the implementation of the MPOWER package since 2007. For more information on progress in tobacco control at the global, regional and country levels, see the WHO Report Series on the Global Tobacco Epidemic. Brazil and Turkey are the only countries in which all the measures provided for in the MPOWER package have been implemented in full and at the maximum level of efficiency.

The WHO report on the global tobacco epidemic 2021: New and Emerging Products is the eighth WHO report providing information on the state of the tobacco epidemic and listing recommended interventions to control with her.

Why alcohol is not banned

The World Health Organization (WHO) defines a drug as a chemical agent that causes stupor, coma, or insensitivity to pain. The term refers to opiates or opioids, they are also called narcotic analgesics.

Depending on the individual characteristics of a person, dose and concentration, ethanol has narcotic and toxic effects. May lead to stupor, coma, dulling of pain sensation and depression of the central nervous system. The systematic use of ethanol is addictive. However, these signs are not enough to classify ethanol as a drug. Its toxicity is also not great enough to be considered an official poison. WHO classifies ethanol as a psychoactive substance.

## What can health care and the doctor in particular do to increase the effectiveness of quitting smoking and alcohol

At the core - work with the causes of alcoholism

One of the factors of addiction to alcohol is the lack of positive emotions due to the reduced level of endorphin - the hormone of joy. To increase it and cause euphoria, an addicted person tends to drink alcohol. But there is another way to enter a joyful state - the production of endorphins is stimulated by sports. Another reason for cravings for alcohol is boredom. Traveling, hiking, attending cultural events and many other activities will help distract you from unpleasant thoughts.

In addition to the above reasons, there are many others, such as the desire to imitate others, loneliness, the desire to forget about problems, get rid of feelings of guilt or responsibility. A psychotherapist can help to establish the true cause of alcoholism and eliminate it. In this case, it will be possible to get rid of the addiction that has appeared. Attempts to stop drinking without addressing the cause will not lead to a stable result. Most likely, after some time, the former alcoholic will return to his former way of life.

So, you can stop drinking on your own, but the fight against alcohol will require tremendous willpower. Save time and effort will allow timely access to specialists. A therapist can help you stay motivated and resist temptation. Soon the addicted person will begin to feel like a different person, free from the shackles of alcoholism.

## Stress, anxiety-depressive disorders, cause, frequency of occurrence

Stress is a state of the body characterized by emotional and physical stress caused by various adverse factors.

The causes of stress can be very diverse:

- physical stress;

- family problems;

- monotonous monotonous activity;

- anxiety, sometimes unreasonable;

- adverse environmental conditions.

It is important to identify the causes of stress in time and try to eliminate them. To effectively identify the causes of stress, you need to pay attention to the reaction of the body and the corresponding symptoms.

An anxiety-depressive disorder is a condition in which a person has symptoms of both anxiety and depression at the same time, but individually they are not so pronounced as to clearly define the disorder. Its danger lies in the fact that it can end in suicide.

Anxiety disorder occurs at any age. It is characterized by a less favorable course than with anxiety and depression separately.

Women are more likely to suffer from this disorder. This is due to the frequent variability of the hormonal background in different periods of life - menstruation, pregnancy, menopause. However, there are trigger (provoking) factors that contribute to the occurrence of the disorder equally in both sexes.

Genetic predisposition is one of the most important reasons for the development of anxiety-depressive disorder. Children whose parents suffered from this pathology are more likely to suffer from the same ailment.

The relationship of anxiety-depressive disorder with psychotraumatic events is not always traced, but long-term stress can still affect the onset of the disease.

Thus, the causes of the development of the disorder can be both internal (heredity, hormonal imbalance and the balance of neurotransmitters in the brain) and external (death of a loved one, job loss, etc.)

## Methods of dealing with stress, emotional burnout

Prevention and treatment of chronic stress are:

• - change of the environment, team, social circle, and necessarily - change in one's own attitude to what is happening;

• - a psychological attitude towards positive, a ban on negative thoughts, a benevolent attitude towards others, teaching an optimistic style of thinking, striving for happiness (reading relevant psychological, esoteric, spiritual literature, books on personal growth, biographies of famous people, treatises created by sages will help and thinkers, autogenic training, breathing exercises, yoga, meditation and other practices);

• - striving for a new, unusual, previously unknown, expanding interests and horizons, finding a hobby;

• - attention to one's appearance, rejection of a dull facial expression, straight posture and obligatory smile;

• - acquiring the habit of leaving problems related to business, work, beyond the threshold of the house;

• - a healthy diet with an emphasis on vegetables, berries, fruits, herbs, dairy products, fish and seafood, be sure to include dark chocolate and bananas in the diet (these products increase our ability to experience positive emotions), rejection of black tea and coffee in favor of green tea, herbal infusions and freshly squeezed juices;

• - giving up smoking, drug use, alcohol abuse, energy tonics;

• - normalization of sleep - observance of the sleep and rest regimen (full night sleep), a walk, a relaxing bath with aromatic oils, warm milk, relaxing music before bedtime, if necessary - short courses of herbal preparations that normalize sleep (after consulting a doctor);

• - sufficient physical activity - fitness, dancing, outdoor games, tourism;

• - communication with family, friends, relatives and friends - visits to theaters, cinemas, museums, exhibitions, concerts, trips to the bathhouse, sauna, bowling, joint field trips; extremely useful course of general massage, self-massage;

• - if necessary - the help of a psychologist, psychotherapist or psychoanalyst;

• - taking multivitamin preparations with anti-stress effects (the composition must necessarily contain sufficient doses of vitamins C, B and magnesium), adaptogens, antioxidants.

## Types of body hardening, effect

- Air hardening:

An important and exclusive feature of air procedures as a hardening agent is that they are available to people of different ages and can be widely used not only by healthy people, but also by those suffering from certain diseases. Moreover, in a number of diseases (neurasthenia, hypertension, angina), these procedures are prescribed as a remedy. This type of hardening must begin with the development of a habit of fresh air. Walking is very important for health promotion.

- Hardening by the sun.

Sunbathing.

Sunbathing for the purpose of hardening should be taken very carefully, otherwise, instead of benefit, they will bring harm (burns, heat and sunstroke). Sunbathing is best in the morning, when the air is especially clean and not too hot, and in the late afternoon, when the sun is setting. The best time for sunbathing: in the middle lane - 9-13 and 16-18 hours; in the south - 8-11 and 17-19 hours. The first sunbathing should be taken at an air temperature of at least 18 °. Their duration should not exceed 5 minutes (then add 3-5 minutes, gradually increasing to an hour). Air baths while sunbathing can not sleep! The head should be covered with something like a panama, and the eyes with dark glasses.

- Hardening with water.

Rubbing is the initial stage of hardening with water. It is carried out with a towel, sponge or just a hand moistened with water. Rubbing is done sequentially: neck, chest, back, then they are wiped dry and rubbed with a towel until redness. After that, they wipe their feet and also rub them. The whole procedure is carried out within five minutes.

## Methods of contraception, their effectiveness

1.Traditional (barrier, chemical, biological, coitus interruptus);

2. Modern (hormonal contraception, intrauterine contraception);

3. Irreversible contraception - surgical sterilization (tubal ligation).

The leading criterion for choosing a contraceptive method is the effectiveness (reliability) of the method, which is determined by the Pearl index. The Pearl Index shows the percentage of contraceptive failures when using the method for one year. The Pearl Index is calculated as the number of pregnancies in 100 women per year. The value of the index is inversely proportional to the effectiveness of the method.

## Methods of protection against sexually transmitted infections

**Barrier (mechanical):**

* diaphragms;
* neck caps;
* sponges with spermicides;
* condoms.

The Pearl Index when using condoms is 12 - 20%. Barrier methods, in addition to the contraceptive effect, protect against sexually transmitted infections, including AIDS. Condoms are the prevention of cervical cancer (protection against infection with oncogenic types of human papillomavirus).

**Mechanical means of preventing STDs**

Mechanical (barrier) means of protection during sexual intercourse do not guarantee 100% safety. They provide mainly protection against unwanted pregnancy, reducing the risk of contracting STDs by only 80-85%. There are several reasons for this:

1. Foci of infection may be on parts of the body that are not covered by a condom.

2. The infection can be transmitted through the household through common hygiene products or sexual toys.

3. Latex has a porous structure, and the size of the pores is many times greater than the size of viruses.

4. Nonoxynol-9 spermicidal lubricant used on condoms does not protect against STDs, according to a 2001 WHO report. By damaging cell membranes, nonoxynol-9 spares neither spermatozoa, nor infections, nor the mucous membranes of the genital organs. By damaging the mucous membrane of the vagina and cervix, nonoxynol-9 "opens the gate" to infections.

While the condom is not the ideal way to prevent STDs, it is considered the most effective. Therefore, it is necessary to use condoms for all types of sex: vaginal, anal and oral. In order not to increase the risks, you should purchase condoms only in reputable pharmacies, observe the terms and conditions of storage, and use them correctly.

## Methods of sanitation work among adolescents to promote contraception

The main areas of prevention of reproductive health in adolescents, which are in front of a specialized service of gynecology of childhood and adolescence, include:

*  Carrying out annual preventive examinations;
* Treatment and rehabilitation of sexual and gynecological pathologies;
* hygienic monitoring of girls under the age of 18 with gynecological diseases and disorders of sexual development;
*  work with children and adolescents to improve their knowledge of the physiology of the reproductive system, prevention of unwanted pregnancy, sexually transmitted diseases, as well as information about the dangers of abortion.