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All our real-world concepts are scattered in a heap of isolated, fragmented descriptions that are inaccessible to the enlightened public; neither physiologists nor biologists even developed an approximate synthesis that would give an idea of the unity of cosmic life, human life and animal life on Earth.

For a whole century, the scientific world and the philosophical world, as-subjected to a course of sleep therapy, they avoid even being promoted problems of the unity of the universe and are quite satisfied with the hypothesis of the the existence of the so-

called physicochemical laws that govern the The life of the Earth and biological phenomena.

And yet Oppenheimer, the world's authority on nuclear physics, at the meeting of the Congress "For Freedom of Culture", convened in 1959 in Switzerland, without hesitation, threw away his explosive formula; "Conduct of living matter cannot be explained by physicochemical laws." We We hope that biologists who are not bogged down in countless searches for details in the biochemistry, will take time to reflect on the meaning of this statement, striking at routine and philosophical inertia, which characterize the modern biological thought. Perhaps they will find time to look around innumerable biological phenomena and compare the various phenomena of life, independent of physicochemical laws, and perhaps they, like us, will come to a philosophical synthesis?

In the Universe, there are predestined orbits for the movement of the stars, such as In the animal body, there are predetermined orbits for circulation the rotation of the cell nucleus, hemoglobin molecules in the erythrocyte, for the rotation of electrons in an atom. Everywhere, in space and on Earth, the same plan, the same geometric pattern, the same direction, the same principle creative creation.

Physicochemical laws are established either by the god of Chance or by the Great God Legislator. There is no third option! Science is incapable of explaining the true the nature of gravitation, electricity, magnetism, light. Technology can to use part of these forces, without even raising the question of their origin. Everything is full of wonders in the world: the change of seasons, sunrise and sunset. Isn't it a miracle that it is possible to foresee an eclipse of the sun Or the moon hundreds of years in advance? Astronomers, like accountants, are exactly calculate this miracle, and the intellectual elite perceive it prediction as an announcement of an uninteresting film.

But the wonders of astronomy are nothing compared to the miracles of everyday life biology. The number of stars is enormous - billions of billions, but their composition, composition, their substance are elementary, their structure is simple, their movements are The complexity of biological processes exceeds thousands of times simplicity of astrophysical phenomena.

What is mind-boggling is the identity of both mathematical orders. The number of stars is enormous, the number of particles of living matter colossal, it is proportional to the size of any living creature, if a tree or an insect.

Chapter 1
Radioactivity
Man and modern warfare

Underwater boats, tanks, poisonous gases and bacteriological agents, bombers, jet missiles increased the technical capabilities of waging war by countries possessing these weapons. The latter became are a million times more dangerous if we compare the rapidity of technical evolution with the snail's speed of the evolution of the thought of the human masses. Until now, the ENT even well-informed statesmen cannot imagine a grandiose danger: the mass destruction of humanity. Statesmen amuse themselves by sending diplomatic notes, the organization of conferences, the increase in armaments, without thinking that the future war will be reduced to the destruction of all life on Earth.

We must be aware that every technological progress is an extension of a person's hands, his will and thought. Make a little effort of imagination and you will understand that a modern person, armed with missiles and submarines, is a monstrous a body that is millions of times larger than a mammoth, AND Next to this monstrous magnitude, the thought of modern man is not superior in intelligence to a mole digging a hole for its family. Man is as blind as a mole, but he does not dig his burrows for prolongation life, but for a short postponement of atomic death.

None of the politicians paid attention to the doctor's appeal Kimble, President of the Geographical Society of the United States. Dr. Kimble mathematically proved that the huge costs spent on nuclear armament for a year, would allow the irrigation of the Middle East, to increase the temperature of the Gulf Stream, to use the enormous resources of the Congo. And these costs would not exceed the cost of maintaining one week of nuclear power war.

Cosmic radioactivity
and technological radioactivity

Like Oedipus at meeting with the Sphinx, mankind at the end of the XX century is faced with a solution tragic problem of artificial technological radioactivity. Her We must decide or perish under the ruins of Western civilization.

It is necessary in the coming years to neutralize, detoxify, to clear the clouds of radioactive particles floating in the atmosphere, or to take inevitable death as a flock of sheep, without flowers and wreaths, on the historical massacre created by eminent scientists. In a world narcotized by daily the press, engaged in sports, enjoying small pleasures, vacations, no one realizes that they are dancing on the volcano the day before terrifying eruption.

In the near future, in 20-30 years, the population of our small planet will face the fact of a huge reduction in energy reserves. Generations of physicists such as Curie, Becquerel, Rutherford, Bohr, Einstein, Oppenheimer were disinterested idealists who sought, risking their lives, a new energy source. Unfortunately, their research radioactivity aroused the interest of military and political figures.

Over the past 20 years, the number of civilian enterprises using nuclear power energy, remained insignificant. But the number of stockpiles of atomic bombs and missiles enough to destroy the life of people, animals and plants 10 times over Earth. One political bloc uses blackmail, the other is forced to to re-equip. The danger to humanity is increasing with each minute.

The human and animal organisms have been subjected to the action of the ocean of radioactive particles sent by the Sun, coming from the interstellar space. Cosmic rays are absorbed by water, which We drink, the foods we eat. British Institute of Carcinology published a work on natural radioactivity in food. There are quite interesting data in this work. Here some of them.

Tea and cereals contain a very large amount of radioactive particles; Brazil nuts absorb a maximum of radioactive barium particles and strontium; Among other foods, the liver is very radioactive, kidneys, fish, milk. Only fruits and vegetables do not contain radioactive particles of natural origin. Diet with predominance of cereals contains 10 times less radioactive particles than the mode based on the animal proteins.

Every time the body is exposed to artificial condensed in the atmosphere around atomic laboratories, the number of microexplosions in the human body increases in geometric progression. Permissible dose of technological radioactivity has not yet been established by either physicists or biologists. But, Given the schizophrenic course of increasing nuclear explosions, one must think that in the near future the limit of incompatibility with life. Physiologists and doctors are obliged to stop the administration of radioactive isotopes into the human body.

It is necessary to organize a periodic measurement of the degree of radioactive contamination of the atmosphere, water, food. It is necessary in every country to carry out constant cooperation, on the one hand, between physicists, on the other hand, between biologists and doctors. Among the mandatory information, presented to each member of the government, should be hung on the wall offices, an accurate radiogram determining the degree of contamination radioactive fallout.

The International Congress of Climatology in Rome has published some observations of atmospheric pollution capable of to change the climate of our small planet, deprived of effective protection. Harmful particles and waste are continuously accumulating in the atmosphere of our thriving industry, which provoke harmful climate change. The global combustion of coal and oil emits 8 million tons of carbon dioxide every day into the atmosphere. This amounts to 240 million tons per month, almost 100 billion tons per year.

Let your imagination run wild a little and you will come to a pretty dramatic conclusions, and you will be able to properly appreciate the carelessness of the political figures.

Physicists have discovered a very saturated electromagnetic layer in the stratosphere, playing a huge role in all phenomena of earthly life. This layer is called the Van Allen ring. Director of the Radio Astronomy Laboratory Cambridge Martin Ruhl argues that nuclear explosions in this layer could to cause irreparable changes in life on Earth.

Hygienists require clean water for drinking, because thanks to purification Typhus and dysentery have long disappeared. Sterilization of milk for breasts children at the beginning of this century reduced the mortality of newborns from 55 to 5% without vaccinations. These are indisputable facts. But no one among hygienists and doctors are not seriously studying radioactive contamination of the atmosphere, no one no one cares about purifying the air we breathe report on the increase in chronic oxygen deficiency, which makes apathetic, indifferent, and inert.

Microexplosions and physiological radioactivity

Try it to compare the short duration of organic life and the existence of celestial bodies that are tens of millions of years old. In XX c. The average life expectancy of a person was 65-70 years. Horses live 18-20 years, dogs 12-14 years, fruit trees 30-40 years, insects several weeks, and from their representatives - mayfly - a few hours.

According to biological statistics, average life expectancy of a living being must be equal to the time that has elapsed before the state of full maturity multiplied by 6. A person reaches maturity between 22 and 25 years old. He could have lived 120-150 years if his lifestyle hadn't reduced the energy reserves with which he was endowed from birth, and if his relatives in the family, at school, at work, in institutions did not would have helped him very kindly to shorten his longevity.

Comparison of the very short life span of a thinker and a worker man with the existence of planets exceeding tens of millions of years, leads us to the following conclusion. On the one hand, great simplicity physicochemical organization of the planets, their predetermined rotation on orbits, on the other hand, the incredible complexity of the mechanisms that make up life, A huge number of living particles, their general interdependence, inevitably determining their vulnerability to external and internal aggressive factors.

The astronomical figure for the existence of celestial bodies follows from their simple structure and regularity of their movements. The complexity of living substances, symmetry and asymmetry, an inexorable and inexorable order in chaos innumerable living molecules, their incredible number, biochemical reactions, the constant wear and tear of living molecules from their disaggregations and their reconstructions determine the short our life expectancy.

If we remember that the cerebral cortex contains 14 billion neurons, enclosed in a gelatinous mass not exceeding 2.5 mm, if Remember that the brain contains 90% mineralized water, we are forced to Let us assume that the anatomical substrate of our thought, creativity, of our technical and scientific achievements does not exceed 300 μm. What A monstrous concentration of energy in such an insignificant space! Such a concentration of energy makes us admit an explosive nature innumerable brain functions. Dehydrated anatomical and histological the substrate of the brain does not exceed 100 g. a car weighing 100 g! And yet, these little minds in 100 g created electronic machines and satellites sent into outer space.

The transformation of solar energy into vital energy is carried out through by means of light energy into tamed radioactivity, discovered by modern nuclear physics. In plant cells, along with microexplosions of natural radioactivity, there is a second The life-creating factor is photosynthesis.

Maybe photosynthesis also has its origins in transformation tamed radioactivity?
Our hypothesis about microexplosions, expressed in 1958, was confirmed in 1960 at the National Laboratory of Nuclear Physics in the USA. It was Atomic Energy Commission report transmitted, this message repeated by several American scientific observers.

American physicists have constructed an armored chamber that completely isolated, with an area of 1t8 m. To achieve complete isolation of the chamber from the penetration of atmospheric radioactivity, 60 tons of steel were consumed at the thickness of the walls is 20 cm. The test subject, a healthy person, without clothes, wrapped in a special cloth, he lay down on the couch. Near the couch there was a crystal of potassium iodide (20 cm in diameter), enclosed in steel cassette.

A crystal of potassium iodide has the property of flashing every time when a radioactive particle hits it. Registration of light caused by radioactive particles was produced in full darkness with the help of a photo-animation mechanism on a special ribbon. On the screen outside the chamber and linked to the counters, Physicists registered the smallest radioactive particles emitted by human body. These experiments were carried out repeatedly on a large number of subjects.

During each second, there are 26 micro-explosions in each cell. Verification of this observation is now not difficult, and we think that this experiment will open up broad horizons for biology and physiology and medicine. Thus, it has been proven that every minute in our body Billions of micro-explosions occur. Hence new problems arise. First of all, it would be necessary to try to establish where the warehouse is located biological microbombs. It is known that cell membranes are the site of activity of enzymes located on the surface of cells. Their explosive activity is a biological phenomenon. But there is another, pre-explosive system - myriads of microbomb depots, attached to mitochondria. Each mitochondria is a metabolic intracellular apparatus of extreme importance. Their number many times more than the number of cells in the human body.

Mitochondria of a very thin formation in granules or rods are located around the cell nucleus. They have an enzymatic ability explosives. Mitochondria are the main, if not the only, the focus of oxidation processes in the cell, i.e. cell respiration occurs with the help of mitochondria. This is a fundamental fact.

Alleged effects of gradual explosions of radioactive microbombs of our body allow us to put forward some hypotheses, quite plausible within the limits of available observations.

1) Radioactivity in the human body - "tamed", detoxified, specially oriented, well adapted to the needs of life, is the primary source of vital energy.

2) Life-giving animal radioactivity is different from destructive radioactivity radioactivity, which kills quantitatively and qualitatively. Nuclear Physics is designed to measure the rhythm of atomic microexplosions in each section human body, in every organ, in every tissue, in every cell.

3) Groups of biologists who have a very elementary knowledge of the fields of nuclear physics, as well as physiologists and physicians, must work together with physicists.

Huge horizons are opening up for biology, physiology and pathology. The birth of nerve currents, their transformation into elements of thought, screams newborns, restful or restless sleep, hunger, thirst, vegetative and psychic phenomena, the first efforts to catch, grasp, walking, the birth of curiosity about the things around you, a sense of security in the arms of the mother, each enrichment of the tactile, visual, acoustic and gustatory sensationsshould be accompanied by a modification of the intensity and rhythm of microexplosions in various areas of the body.

It is already possible to measure the number and register various rhythms microexplosions and to determine the interdependence between primitive mental processes and modifications of rhythm and intensity micro-explosions. It would also be possible to measure the correlations between the former babbling, the first spoken words and micro-explosions.

If newborns during the period of ultradynamic growth were found to have the number micro-explosions exceeding 26, if the body temperature increases A noticeable increase in micro-explosions would have been detected if the number of microexplosions will be underestimated, - the law of transformation of adapted physiological radioactivity into vital energy would be established.

The theory of vitalism, the subject of sarcasm and ridicule on the part of biologists and physiologists, will become an irrefutable truth, the basis of a new understanding of the of the living world, which will unite into one whole the physiological radioactivity, photosynthesis, radiation (luminescence) of living cells.

We hope that in the near future doctors will have the opportunity to to record the number of physiological microexplosions, as they now believe the number of pulsations and breaths. These devices already exist. They need to be to simplify it, as the first radio devices were simplified thanks to transistors.

Chapter 2
Man in the Universe
: The Eye and the Sun

In 1958, in The 7th edition of the book "The Eye and the Sun" by Prof. S.I. Vavilov, Academician of the USSR Academy of Sciences. I would like to attract the attention of biologists, physiologists and doctors to this work.

Just as Leonardo da Vinci combined huge encyclopedic knowledge in all fields of science with the talent of a brilliant artist, so S.I. Vavilov is both an outstanding astrophysicist and a great a biologist. This is a rare phenomenon in the field of science of our time.

Surprised readers will get acquainted with the book of the scientist who managed to to penetrate into the most wonderful structure of the Sun with its life-giving radiation and who made amazing connections between this star and the tiny human eye. His work is perhaps a rare The only combination of a brilliant astrophysicist and a deep biologist. Allow me, an old indefatigable reader, to express my modest reflections inspired by the work of S.I. Vavilov.

The light visible to the human eye always brings energy that warms matter and causes chemical reactions in it. At the beginning of the XIX century, physicists discovered a wide range of invisible rays, the number of which exceeds the number of rays visible to our eye. These are infrared and ultraviolet rays; later, radio waves were discovered, X-rays and gamma rays. Thus, an insignificant part of the visible of rays is drowned in numerous waves invisible to our eyes. Vavilov wrote that every time the horizon of our knowledge expands, we we are present at an immeasurable increase in our total ignorance.

We must never forget that our body for millions of years adapted to the squally action of cosmic rays (bombardment), only a small part of which has been deciphered by physicists, but is ignored by doctors who do not deal with the phenomena of cosmic life.

Light rays, meeting an obstacle, do not turn away from their trajectories, bend around it and continue their path in the Universe. Grimaldi dubbed this phenomenon diffraction, Newton established that diffraction is not depends on the physical composition of the envelope particles. Diffraction - An inalienable and indisputable property of light. This is a statement, not a Explanation.

Like a living cell, it takes in certain substances and rejects others (in other words, the cell is able to choose), as well as light Rays have the ability to choose their paths.

Let me put forward the following hypothesis: it can be assumed that Light rays have a "will", i.e. that they are alive. This hypothesis may to change the abstract mechanics of Newton and modern physicists. If the light alive, if he is able to bring some grains of life, all ours The concepts of the origin of life, of evolution, must be completely revised.

Light emanates from the material substance of the Sun; it is absorbed substance, it disappears in it (this is evident in photosynthesis). Perhaps light itself can be transformed into material substance When You swallow a lump of sugar, you absorb light!

Let's think a little about the transformation of chlorophyll grains into starch and glucose. Without the meeting of chlorophyll grains with the sun's rays, the formation of starch i sugar in a modest leaf would be impossible. And this presence a ray of sunlight in each piece of sugar - a supplier of solar energy, converted into chemical energy," explains the vital energy generated by the Sun.

Light exerts pressure on matter, it has mass, it is able to remove electrons from the atom, which means that light contains radioactive energy. By absorbing light, matter heats up.

3 at the beginning of the XX century, Planck made a very important discovery. He stated that the PC can be absorbed otherwise than in a precise, mathematically determined portion. He called this portion of light "quantum". Rhythm, periodicity of waves - are they not the source, the nature of the origin of rhythm, periodicity of all biological phenomena? Cosmic symphony - is it not the cradle of our music, our songs?
The light-carrying particles are surrounded by electromagnetic fields; each movement in the electromagnetic field provokes a discharge, accompanied by the transformation of the accumulated energy into light waves.

Modern physics has proved the identity of light and electromagnetic waves. In addition, it has discovered the rhythmic periodicity of light waves, but it is powerless to explain the first cause of the origin of this immanent order, which is the primary factor in all changes in cosmic life and the life of our small planet, so defenseless because of the excessive irresponsibility of a few atomic scientists.

We qualify a phenomenon as "explainable" if our assessment of the corresponds to our preconceived notions, our habitual mental orientation. Our thought is difficult to detach itself from the ingrained traditional syllogisms. (The blind mole digs its holes automatically.)

In order to understand the origin of gravity, visible light waves, and waves beyond the spectrum, we will have to change something in our habits, in our orientation, in the mental climate of our consciousness. It will be a long time before scientists can explain the origin of the marvelous life of cells, the origins of our thought, and the majestic symphony of stars.

Our conceptions of the universe have culminated in the concept of inert matter, which stores in its interior intra-atomic motions and light. During the thousands of years thought that matter is completely inert. Recently, physicists have discovered that

streams of electrons and protons, encountering obstacles in their path, crossing gaps in molecules, around infinitesimal material particles, have the same trajectory of movement as light rays. Cosmic rays are deflected aside by terrestrial magnetic fields and, therefore, consist of particles that have an electric charge. The speed of cosmic rays is equal to the speed of light.

The physicist Dirac put forward a hypothesis according to which light can be transformed into matter. In the electromagnetic field located in the nucleus of an atom, quanta of light can decay into two particles: an electron and a positron. According to Vavilov's beautiful expression, "A melody turns into a violin." The deep connection between light and matter is quite obvious.

Modern physics is not in a position to explain this phenomenon. Beyond the limits of direct and scattered light, we are exposed to light rays that do not come from the Sun. Every body, every heated object glows. Everything around us is warm. On our planet, without exception, everything: minerals, water, plants, animals, birds, man - everything is warm, everything glows, emitting visible or invisible rays; every decrease in the temperature of lifeis inevitably accompanied by a decrease in the radiation, which usually causes some kind of painful disorders.

To maintain health, a certain degree of Phyapological radiation, 1 (among biologists, physiologists and doctors A new search area opens. It becomes obvious that luminescence of all parts of a living organism is an expression of vital energy, as well as radioactive microexplosions.

Eyeball. How can an organ be born in which everything is allowed Problems of Modern Optics with Perfection Inaccessible to Human a mind that surpasses the most precise tools created by the most the most skilful opticians?

"Nature has proved that it has sufficient intelligence, creative imagination and the most subtle mathematical mind to solve the the most complex problem of living optics" (Vavilov. "The Eye and the Sun". P. 82). All our sciences: astronomy, biology, physics, religious mythology - are infinitely tiny in comparison with the ultra-scientific the mind of nature.

The diameter of the eyeball is 16 mm in a newborn, 24 mm in an adult people, 5! mm in a horse, 5 mm in a rat. Surface of the outer sclera is covered with a choroid containing blood capillaries, irrigating and nourishing the eye. Retina consists of two layers: the outer, coated with pigment, and the inner layer on which the the terminal network of the optic nerve.

The eye has all the features of a movie frame: we see volume, not photographic planes, we perceive color, movement. Our A binocular kinorama is a kinorama without a tape, and it costs us cheaper. And we never realize the value of our vision, nor its range, which allows us to see the midge on the plate and through a second after that, the stars of the Milky Way.

Both layers of retina contain countless nerve fibers that are in contact with cones and rods. Every nerve fiber affects one cone or one rod. They are vigilant sentinels, signaling to us about everything that is happening around us, and giving us opportunities to work, ensuring our connection with science, art, family, nation, all of humanity. What greatness is Millions of these infinitely small devices! How fragile they are, defenseless and at the same time recoverable throughout our lives! How to It is a pity that in secondary schools they do not find time to show in all their the magnificence of our vision!

The rods and cones are protected by a purplish-red screen, which is very It quickly discolors and immediately recovers. This is a miracle The restoration of the purpura of the retina has not been explained either by physiologists or by modern optics.

In the dark, the eyes begin to adapt, it recovers very quickly sensitivity of the retina. Under these conditions, the sensitivity of the cones in tens of times more than in the light. The sensitivity of the rods can increase hundreds of times within one hour. These phenomena remain mystery for modern science.

In the outer layer of the retina there are black grains. It is believed that they are designed to soften too much light. When the light fades, the black pigment sinks to the bottom of the retina so as not to serve as a screen, so how all the intensity of light is needed now. How amazing adaptationI am infinitely small particles and what solidarity with everything body to create the most favorable conditions for good visions! Neither physicists nor optics have yet been able to create an optical apparatus, capable of protecting the human retina with such instantaneous precision, and such lightning-fast automatism.

The brain, like the eyeball, is generated by the Sun; Every thought is the offspring (or offspring) of the Sun. Accommodation of our eyeball to It is obvious to the sun. The work of Prof. Vavilov allows us to comprehend the problems that posed by biological adaptation of the eyeball, which are connected, on the one hand, with the brain, on the other hand, with the Sun, Physiology and

pathology the eyes will remain incomprehensible if you do not know the structure of the life of the Sun and a deep correlation between it and the eye.

Vision and the brain

Our The ability to see is considered as a banal everyday phenomenon, but no one except Goethe paid attention to the miracle of sight (he owns phrase: "If the eye were not like the Sun, it would not be able to to know"). Just as there is a synergy between the Sun and the grains chlorophyll in the small leaves of each plant, there is a miraculous the synergy between the Sun and the countless purple grains in our retina. Chlorophyll is the basis of our chemical nutrition. Without purple retina, irrigated by photons of light rays, our vision would be inconceivable, as well as our unreliable knowledge of the world, our thought, our art, our science - Such a moaning to the wonders of life!

What a poor, routine, inert education creates cold and blind specialists, unable to understand, to notice that we born by the Sun and that our civilization distorts, kills in them the memory of our origin.

Without the ability to see, our perception and understanding of the world would be immeasurably impoverished, it would also be unthinkable to accumulate objects technology and art. Our entire culture, like all other world culture, was born and is developing due to the presence of our little eyeball, associated with miraculous and very complex mechanisms intracranial territory.

We are forced to move in order to navigate in the dark. The eye makes it possible to navigate in huge spaces. Each A tiny grain of our retina is a powerful spotlight that gives the ability to be in connection with outer space.

A microscope allows you to see infinitesimal particles, telescopes - movements of the planets. But these devices are not convenient to use, their field of view very limited, they are nothing compared to the human eye, thanks to the small eyeball we are endowed with the freedom to see, to understand, comparison, comparison. Nevertheless, 99.9% of people prefer remain blind to the wonders of life, trample on free thought and free look. To the small minority of people of good will our The eye gives hope that after the monstrous wars, the day will come when Humanity will show a desire to see, contemplate, and admire the universe. The optic nerve consists of a million fibers.

This number is 38% of all centrifugal and centripetal fibers that originate in the brain. Along with motor (motor) fibers that control contraction and expansion pupils, there are nerve fibers that catch, absorb and conduct light rays to the subcortical nuclei of the brain (hypothalamus and neuro-pituitary gland). Some of the optical fibers approach the spinal cord.

Steppes to illumination by the sun's rays falling on the retina is determined by the human tissue hydration level, carbohydrate metabolism menstrual cycle. There is also an effect of sunlight on the psyche of newborns to the growth of the cerebral epididymis (pituitary gland). Zoologists The effect of sun irradiation on the bearing of eggs in birds and the growth of horns in birds is known. deer, skin color. Visual impressions play a final role in sexual attraction of animals and in aesthetic evaluations of man.

Vestibular apparatus that continuously regulates relationships skeletal musculature with terrestrial gravity, is also intimately related to the degree of muscle tone of the eyeball. While walking, Vertical and horizontalmovements of the head; the rhythm of these movements, associated with the interference of walking, provokes a slowdown in the endolymphatic flow in the vestibular apparatus.

There is a system of optical regulation that automatically acts in three spatial directions:

I) movements of the outer muscle of the eyeball, which changes the visual axis with extraordinary rapidity;

2) tilt of the lens;

3) tone of the smooth ciliary muscle, The number of movements of the eyeball ranges from 100 to 500 per second. They are performed by six muscles, the seventh ensures the elevation of the eyelid.

The movements of the eyeball are controlled by centers located in the central brain stem. These centers are a well-coordinated keyboard. In this regard, let us recall that all vital processes, both in cells and tissues, in organs and in fluids, are keyboard

systems that strive for biological harmony.

But the complete, always sought balance is never achieved. When several systems of various biological keyboards are disturbed, then disease sets in. It is naïve, ineffective, and even dangerous restore vital harmony by chemical means alone, since they often increase disharmony and disturbed equilibrium.

In normal vision, the voluntary and automatic fixation of the image always requires the synergy of the entire cerebral cortex. It is rare that ophthalmologists are aware that the eye is part of the brain placed in the orbit. By designing into a huge space, the eye becomes an optical-tactile instrument capable of transmitting an alarm signal in case of danger, organizing the search, selecting, classifying, comparing, comparing images that stimulate thought, artistic and scientific creativity, generating sympathy and antipathy, stimulating and enriching the physical, emotional and contemplative state.

The retina of the eye is a screen subjected to incessant bombardment of light rays, which is obliged to constantly transmit innumerable images to rods and cones, to the grains of the visual purpura, with their very short life, but always restored by the birth of new layers, needs well-organized protection. The first duty to emphasize the hydration of the eyeball, which is necessary to prevent the drying of the eyes (note that animals living in water do not have an eyelid and hydration is done by osmosis through the sclera). Intraocular fluids are constantly renewed, like water in an aquarium.

Thus, the eyes, like the brain, remain underwater organs, irrigated tears (outside) and inside with eye fluids. The eyelids protect the eyeball from dust and foreign particles. It is enough slight irritation of the eyelashes, sclera, conjunctiva to stimulate the protective reflex of the eyelids. They can even be provoked by acoustic stimuli.

For a photographer, the human eye is a rather strange optical instrument. The camera is static, the eye is constantly in motion. Our idea of space is due not only to one image, but also to a mass of other different images that change rapidly in time. Retina is like a cinematic screen; it is the brainIT and retains visual memory in its film library.

It is assumed that the photometric candle is still visible at a distance of 7 km. The quantum theory explains light to us as a hail of photons - particles of light energy of equal magnitude. Every second, 400 photons hit the pupillary opening; a tiny fraction of a second is enough to to provoke a light sensation; a few dozen photons are enough to unleash a chemical reaction.

An amount of energy equal to one photon (atom of the beam) provokes the great miracle of vision. A drop of energy - and a person sees!

Blood supply to the brain

Life and brain activity depends on a continuous flow of oxygen and blood to the neurons, dendrites, neuroglia and brain centers. It is also necessary the existence of special mechanisms for regulating oscillations blood pressure, modifying the strength and rhythm of heart contractions.

The location of the brain's neurons is determined by geometric orientation blood capillaries; Capillaries are the axis around which neurons are located. The number of neurons depends on the caliber of the capillaries. Around the vessels of large caliber there are several layers of neurons, located in floors, around the vessel of small caliber there is only one layer of neurons (Cajai, 1909). Therefore, we can talk about planned orientation of neurons to capillaries.

As plant roots are able to search for groundwater and nutrition in the soil, In the same way, neurons search for G and receive their oxygen and other nutrients substances in the blood capillaries, dendrites are also surrounded by capillaries. There are even intracellular capillaries that penetrate the cytoplasm neurons. High neuronal dynamism requires non-stop delivery oxygen. It is enough to stop the flow of oxygen and neurons for 5 minutes die.

The structure of neurons is a modification of mesenchymal cells, capable of locomotion. Neurons are endowed with the ability to approach the capillaries. Completeness of the Neuronal Migration Function in the Cerebral Cortex ensures the optimal degree of efficiency of all functions, all regulation, all the signals sent by the brain to every point of the human organism, as well as the endless reception of signals from each cell, every tissue, every organ.

A decrease in the ability of neurons to migrate in the cerebral cortex leads to reducing the flow of oxygen, glucose and other

nutrients, the removal of organic and inorganic waste will be inhibited, harmful metabolites, toxins.

Leibniz's introduction of the calculus of infinitesimal quantities in physics discovered the Huge horizons in astronomy. The time has come when the differential Calculus will take its well-deserved place in physiology and biology.

Blood supply to the brain is provided by the internal carotid and vertebral arteries. Fusion of two carotid arteries with vertebral arteries creates the circle of Willis, discovered in 1664. It is a continuation of the internal carotid artery.

The richness of anastomosis, the diameter of which is very large, provides continuous unimpeded blood flow into the blood network of the soft meninges, the most important in brain irrigation. There is no organ, not a single function in the human body, which does not would depend on the incessant irrigation of the brain. Obstruction in blood flow, even for a few seconds, can lead to irreparable, often even fatal disorders. And this is an extremely necessary irrigation is governed by a tissue structure as fragile and vulnerable as spider threads. This phenomenon is incomprehensible to our little mind, who remains blind to the wonders of life.

There are multiple anastomoses between the arteries of the brain: the middle and anterior cerebral arteries, between the anterior and posterior, between the posterior and middle arteries, Amazing planning and calculation in The circulatory networks of the brain are amazing. Weight is provided. If some large paths are blocked, then there are secondaryWays to ensure free circulation in the event of obstacles provoked by mechanical, chemical, thermal or microbial injuries. In case of significant compression of the internal carotid artery or even two internal carotid arteries anastomosis between internal and external carotid arteries arteries can become pathways for blood flow as they expand to the brain. It takes a period of 6-8 weeks for the formation of this collateral circulation. This is the most beautiful, the most remarkable confirmation huge opportunities for self-healing.

The constancy of venous blood outflow is also well ensured. Every groove cerebral cortex is able to organize the outflow of venous blood into sin directions. Septa of the venous sinuses located B hard meninges, are immobile structures unable to contract or expand. These structures provide free and constant flow of venous blood.

Venous blood coming from the dura mater sinus, it flows into two jugular veins. Venous sinuses in cases of blockage jugular veins can give their blood to the superficial veins of the skull.

An increase in carbon dioxide in the blood causes dilation of the veins of the soft cerebral shells. The observations of Prof. Klosovsky and Dr. Kosmarskaya confirmed the Our assertion that with an increase in carbon dioxide in the brain of patients they find numbness of the big toe and a cold foot,

It is necessary to palpate the big toes of each patient, the dorsal part of the foot and the lower part of the leg. If the thumbs are cold, there is a compression of arterial capillary loops. This is pre-arteritis.
Carbon dioxide mixed with other gases causes the expansion of blood vessels in both hemispheres of the brain, in the hypothalamus and in the oblongata brain. Is this expansion accompanied by an increase?"!
blood temperature and an increase in the speed of blood flow. Blood Oversaturation oxygen, like hyperventilation, helps to reduce the speed of blood flow. Caffeine increases the speed of cerebral circulation, histamine increases its reduces.

An increase in the volume of carbon dioxide in the blood is accompanied by an expansion of arteries of the meninges. After removing excess carbon dioxide The arteries return to normal, but the veins are still there for a long time remain extended.

Each capillary provides blood flow to the brain cells within a radius 25 μm. During cerebral edema, the distance between the capillaries increases, and blood flow to neurons decreases. Diameter of the closed capillary is 2 μm. The gray and white matter of the brain is irrigated by the network ultra-thin capillaries. If the vestibular apparatus is irritated by pouring hot or cold water into the ear, then there is an expansion of capillaries of the meninge. In case of irritation of the cat's eyes intense light expands the capillaries of the brain. Light and acoustic waves, stimulating hearing and vision, provide during wakefulness capillary diameter sufficient to maintain normal activity of the brain.

By injecting substances opaque to X-rays into the internal carotid artery, the cerebral velocity was established circulation equal to two seconds. Given that these substances increase the blood viscosity, it can be assumed that the blood circulation rate in the brain even more. It is quite plausible that 110 km of brain capsIllyarov Blood runs in one second. Consequently, the circulation rate in capillaries of the brain is 6600 km per minute, in an hour the blood runs almost 400,000 km.

Apparently, such a rate of capillary blood flow is necessary for the normal meeting of the light waves of the Sun with the retina of the eyeball. The retina, the hypersensitive and detached part of the brain, is bombarded light waves falling on its purple. Light stimulation transmitted to the brain.

When the proportion of velocity between light waves and velocity is disturbed blood circulation in the capillaries of the retina, visual disorders accompanied by impaired neuronal activity in the cortex brain and in conducting visual sensations in the fibers of the optic nerves. This is a problem that deserves the attention of ophthalmologists and neurologists.

It is also necessary to review and think over the planned proportion between the the speed of blood circulation in the brain and the speed of propagation acoustic waves, as well as to establish the ratio between the speed of blood circulation in the brain and the possibility of speech articulation.

Everything is provided for in the final plan. The human body is well It is armed against thermal, chemical and microbial aggression. Lack of real knowledge of the physiology of the deep structures of the body, naïve gullibility of doctors in the success of the use of only medicines prevent medical faculties from being included in the curriculum the concept of self-healing, the use of simple and effective means for the release of protective forces. How many crippling interventions could have been avoided!

Vasomotor and autonomic nervous system. Medical literature contains thousands of works devoted to vasomotor and autonomic nervous system. Claude Bernard outlined, Langley expanded the concept neurovegetative system, Lerich (1940, 1944) proposed sympathectomy.

Neurovegetative disorders explain the origin of the ulcer stomach, hypertension, arteritis. When a doctor is unable to explain the origin of disorders that are unclear to him, he covers up his ignorance the so-called disorder of the autonomic nervous system, a large sympathetic or solar plexus.

The experiments of Forbes and Cobb (1935) showed that irritation of the cervical sympathetic nerve causes compression of the arteries of the soft meninges. This compression is observed on the arteri-ols, the diameter of the of which varies from 110 to 340 μm. It does not depend on arterial pressure and does not exceed 8-10% (the reduction is insignificant).

Prof. Klosovsky carried out an interesting experiment. He united a few micrographs taken through a transparent window after craniotomy in an anesthetized cat. They show that stimulation of the sympathetic nerve with an electric current causes contraction arterioles with a diameter of 140 μm; 30 seconds after electrical stimulation, the diameter of the arterioles was reduced to 120 μm. These are the contraction of the arterioles lasted 4-5 minutes.

Tens of thousands patients underwent sympathectomy without any therapeutic result. Removal of the higher sympathetic cervical glands never causes dilation of the arterioles of the meninges (Forbes, Cobb, 1935; Flory, 1953).

IncreaseC02 in the blood contributes to the dilation of veins and arteries of soft meninges. Observations by B.N.Klosovsky and E.N.Kosmarskaya (i960 confirmed our assumption about the accumulation of C02 in the brain of patients, who find numbness in the big toe and a very cold foot,
ask the patient if he has cramps in the calf muscles. Cold big toes combined with cramps are already arteritis syndrome.

The location of brain neurons is determined by geometric orientation blood capillaries. They are the axis around which the neurons. The number of neurons depends on the caliber of the capillaries. Around the vessels of large caliber are found several layers of neurons located floors. There is only one blood vessel around a small caliber layer of neurons. We can talk about the planned orientation of neurons to capillaries. How plant roots are able to search for groundwater and nutrition in the soil, this is how neurons search for and receive their oxygen and other nutrients substances in the blood of capillaries (Policard, 1963).

Even intracellular capillaries that penetrate the cytoplasm are found neurons The active metabolism of neurons requires non-stop oxygen inflow. It is enough to stop the flow of oxygen for 5 minutes - and neurons are dead.

Neurons are endowed with the ability to approach capillaries, like an animal, water-seeking, like a phagocyte, attacking a microbe In any case, migration neurons - which is an indisputable fact.

The distances between capillaries and neurons are infinitesimal. But their meaning is as important to physiologists as it is to astronomers distances between planets. It is known that Leibniz's introduction to physics of infinitesimal magnitudes opened up huge horizons in astronomy. The time has come when differential calculus will take its deserved place in physiology and biology.

Without microexplosions of microbombs attached to the mitochondria of cells, Man would never see flowers and fruits. Without the migration of neurons to capillaries, flowers and the fruits of thought would not be realized.
We need to reconsider the delightful life of the cells of the cerebral cortex. 13 billion neurons are placed in 2-3 mm of gray matter of the brain, containing 90% water. They control all the innumerable functions of the body, receive Countless signals from every point guide and guide life trillions of extra-cerebral cells. And at the same time, they have been years retain an inexhaustible ability to create, to create the Acropolis, give birth to the thoughts of Heraclitus, Socrates, Shakespeare, Newton, Voltaire, Tolstoy, the music of Haydn, Mozart, Beethoven, the art of Leonardo and Vinci, Michelangelo. All the objects around us are buildings, iron roads, aviation, atomic bombs and satellites are materialized thought.

We must realize that agriculture, art, literature, Different religions, music, all creative forces and activities depend on the 2-3 mm of gray matter of the brain, which simultaneously controls the innumerable functions of respiration, circulation, assimilation and elimination.

For 11 years I have been collecting material for writing this work; However, I was less satisfied and did not dare to publish it. Only Prof. Klosowski's (1951) in-depth study of brain irrigation with blood gave me the opportunity to complete my work. In my opinion, Prof. Klosovsky filled a huge gap in anatomy, physiology and pathology. He built the basis of a new neurology, a new psychology and rational therapies for the treatment of nervous and mental disorders.

I will allow myself to express my deep gratitude to this leader Physiological Thought, with which I have had the privilege of collaborating since July 1961 g.

Reading Klosovsky

Klosovsky studied the different structures of neurons, their different shapes and sizes, variations in dendrite branches, different lengths of axial cylinders. The most A large group of cortical cells is represented by pyramidal cells cells. According to Economo (1927), in the cortex of the adult The ratio of length to width of small pyramidal cells is 12/10 μm, medium - 25/15, large - 30-45/15-20 and, finally, for giant pyramids - 50-120/25-80 microns. According to Mettler (Mettler, 1942), the number of giant cells for both hemispheres is equal to 80,000.

In addition to pyramidal cells, stellate cells are also efferent cells cells (astrocytes) characterized by the absence of dendrites that come out from the top of these cells. According to Bekhterev (1896), Sarkisov and Polyakov (1949), their function is to synchronize the set of cells of the cerebral cortex. Perhaps a group of these cells, if this Synchronization will be confirmed, is part of the supercenters. Cerebral Cells are characterized by a huge branching of their dendrites, which In terms of geometric pattern, they resemble a giant spider web.

According to Chang (1951), the velocity of nerve impulse conduction in dendrites is 2 m/s (120 m/min, 7.2 km/h). Chang determined, in addition to that after excitation there is a period of rest, which serves as a a protective mechanism that enables cells and molecules to rest. During periodic rest, the cells are ordered consumption of oxygen, glucose and are freed from metabolites. The same The phenomenon is observed in the activity of the heart corresponding to diastole.
We can assume that everywhere in the organism there is every cell, every molecules periodically delay their biochemical functions, store nutrients and remove metabolic products.

Cajal found tiny spines on the dendrites. Observations Cajal has been confirmed by many researchers. Spike diameter less than 0.5 μm on all dendrites of the brain and spinal cord (human, dog, rabbit, guinea pig and mouse). The pyramidal cells of a dog have from 80 up to 90 dendrites, and the number of spines per cell is 2500. According to Polyakov and Sarkisov (1949), Fox and Bernard (Fox, Barnard, I957), the dendritic system of one Purkinje cell is endowed with 61,000 spinecoses, The surface of these spines together with dendrites is 222,000 μm.

If we remember that the cerebral cortex consists of 14 billion brain cells, If you imagine the number of neurons in the cerebellum and spinal cord, then It will become clear that the number of dendrites and spines is approaching or even exceeds the number of stars in the Milky Way.

Dendrite spines are very sensitive and change their structure and functions in pathological conditions that occur at any point organism. Sarkisov and Polyakov (1949) considered spines as receivers nerve impulses. Chang (1951) considered another, protective function of spines, since they, forming a kind of mechanical barrier, can protect the surface of dendrites from direct contact with axon endings and thereby limit the passage of the nervous momentum.

We prefer another hypothesis. For us, spines are as rich a network as the stars of the Milky Way.

This network leads innumerable associations of creative thought, the transmission of emotions and the awakening ofmemory links.

Many researchers have observed the neurofibrous structure of the cytoplasm of the brain cell. Cajal (1904), Marinesco (1906) and others have shown that the cooling of reptiles and mammals causes hypertrophy of neurofibrils of brain cells. Warming restores the normal structure of the neurofibrillar network. Levi and Meyer (1937), as well as Weiss and Wang (1936), obtained convincing evidence of the existence of the neurofibrillar apparatus in a living nerve cell. They noted that in the culture of tissues of the spinal nodes of a chicken embryo and intervertebral nodes of the human embryo neurofibrils that coincide with the histological picture of the same cells on fixed preparations.

According to Heidenhain (1911), the body volume of the nerve cell of the anterior horns of the human spinal cord is 864,000 μm, while the volume of the axon is 108 million μm. Consequently, the volume of the axon is 125 times greater than the volume of the cell body.

Brain cells are extremely diverse in their size, geometric patterns, branches, and, of course, in their functions, about which we know so little. Think about the structure of trillions of branches of brain cells, spinal cord cells, trillions of fibers peripheral nerves with their endings, and you will understand how wretched and helpless modern neurology and physiology are, which allow themselves to teach therapy without knowing the true functions of the central and peripheral nervous system.

Our therapy never acts directly on the ultra-fine ultramicroscopic structures of brain tissue; we act on the fluids that irrigate the brain and represent 90% of its mass, we try to regulate the composition of blood, lymph and cerebrospinal fluid by modest means.

Physiology in numbers

Newton managed to to express the motion of celestial bodies in mathematical equations. Mathematical thought has the power to transform biology, pathology, and medicine. In its rudimentary application, it can facilitate the discovery of new^ opportunities to illuminate and explain some of the mysteries in the field of human physiology, in particular the physiology of the brain, the mysteries of the normal and disturbed psyche. Here are a few figures.

1. Each cardiac systole of a healthy person is thrown into the stream blood from 80 to 100 ml. is 6400-7000 ml, i.e. 7 l.

2. Circulation of blood and lymph in blood and lymphatic capillaries 5 liters of blood and 2-2.5 liters of lymph are presented. Number of circulating fluids in and around organs is equal to 28 liters, of which; saliva 1500 ml, gastric juice 2500, bile 500-1500, pancreatic juice 700, intestinal juice 3000, cerebrospinal fluid from 130 to 200 ml.

3. The brain and cerebellum (without meninges) contain 82-90% water, musculature 83, heart 71, liver 75, spleen 77, cell 83 %. Each qualitative and quantitative change in the composition of a liquid causes painful conditions.

4. The length of the capillaries of the brain, according to Klosovsky's calculations, is equal to the PO The largest number of open capillaries was discovered by Krogh in the brain, liver, and skin. In the diaphragm, Krogna counted 25,000 capillaries in 1 mm, in the skeletal muscle at rest he found only 200 capillaries The diameter of the cerebral capillaries in a cat is 6.8 μm, in a cat Dogs 7.0, humans 8.0 μm. The diameter is almost the same. Plan Intent identical. For the normal state of brain cells, it is necessary that the distance between the capillaries surrounding neurons and the cerebral capillaries themselves cells would be no more than 25 μm. Number of brain cells located in the cerebral cortex, ranges from 13 to 14 billion

5. The total length of capillaries in a healthy adult reaches 100 000 km, the length of the renal capillaries is 60 km. Total open

surface of all capillaries is equal to 6000 m? The total surface area of the the plane of the pulmonary alveoli is 8000 m².

6. The diameter of the capillaries varies between B and 30 μm. Blood pressure in capillaries ranges from 10 to 20 mm RF. In case of hyperemia, pressure rises to 40 mm. For arteries, with all the proportions observed, this An increase in blood pressure would be catastrophic.
In Raynaud's disease, the pressure in the capillaries drops to 4-6 mm.

The total mass of the muscles of an adult is determined approximately in 24 kg. At rest, the area of capillary metabolism in 1 cm" of muscle mass is 650 cm, and in the entire musculature this surface reaches 3000 m, During physical work, this area increases by 4-5 times.

8. Blood cells are born in the bone marrow of the sternum, ribs, vertebrae, in the diaphyses of the tubular bones, in the lymph glands and in the spleen. The mass of bone marrow was! It produces 300 billion tons of oil daily. erythrocytes. Every two months, the total number of red blood cells updated. The life of one red blood cell lasts from 42 to 127 days. More than 200 billion red blood cells and 2 million renal nephrons die every day ensure the excretion of the remains of microcorpses of erythrocytes. With malignant anemia, hematologists are obliged to arrange for the removal of Eri's numerous microcorpsesin order to avoid intoxication.

9. In a healthy human body, the diaphragm makes 18 movements per minute. It rises up by 2 cm and down by 2 cm. Therefore, it does 1000 movements per hour and 24,000 movements per day.

10. A healthy person has 18 breathing movements at rest per minute and 72 heart beats (pulse beats). These observations simple, easy to calculate. It is much more difficult to determine the number oxygen released 300 times per minute from each molecule hemoglobin and then absorbed by muscle fibers. But we are surprised We state mathematical relations, mathematical correlations between these three physiological phenomena: one breath and exhalation for 4 systoles of the heart, 18 inhalations and exhalations for 72 systoles; Needed one systole for 4 cases of release (cleavage) of myoglobin and its attachments to muscle fibers (72 and 300).

11. To provide the body with oxygen, you need to inhale and exhale 11,000 liters of clean air, of which 360 liters of oxygen per day.

The number of pulmonary alveoli is from 300 to 400 million, their surface is 50 m when exhaling and 130-150 m when inhaling. In a cluster of large cities where the air contains a lot of dust particles, exhaust fumes and etc., only 50% of the required amount of oxygen enters the lungs, Therefore, the population of industrial centers lives with chronic oxygen deficiency.

Modern medicine is not aware of the pathogenic significance of the general hypoxemia (reduced oxygen flow to all organs) and local hypoxia in any part of the body. At the same time, auscultation are made too quickly and forget that the radiographs of the cavity of the chest are not able to measure the volume of oxygen.

12. The conversion of glucose into carbon dioxide and water occurs with the help of PS at least half a dozen biochemical reactions; in striated In the muscle, these 6 biochemical reactions are completed within one-tenth of the seconds.

13. In order to avoid diseases, a healthy body should excrete 1.5 liters of urine, 800 ml of sweat and 100 to 150 g of feces (not only patients, but also most doctors are not interested in urine volume).

14. The osmotic pressure in the glomeruli of the kidneys is 6 atm., and yet less urea at blood concentrations between 0.25 and 0.36 g/l in healthy of a person passes into the urine with a concentration almost 100 times higher - 20 The miracle of this concentration presents an unsolved problem for biochemists. For urea, the adhesion force is fantastic.

15. In the convoluted tubule of the kidney, classical histology has established the existence of four segments. With the help of an electron microscope in proximal segment, a large space occupied by cells that are in constant contact with extracellular liquids. This contact is made by cytoplasmic villi, in their entirety, representing a layer or border similar to brush.

The length of each brush villi is 1.5-2.5 μm, their diameter varies 0.35 to 0.7 μm. There are 120-140 per 1 μm2 of the surface villi. The total surface of the unfolded bristles of the brush of one of the proximal segment should be approximately 20 mm. If

recognize that there are more than 2 m in the two kidneys of an adultln nephrons, the total area of fluid exchange in the villi of the brush border is estimated at 40-50 million mm2, i.e. from 40 to 50 m2.

As in an ice iceberg, in all physiological processes their main part, which determines and provides all the mechanisms of all vital functions, is immersed in the depths, invisible. Fortunately, biological icebergs are enlivened by vital energy and endowed with its heat.

Under the influence of any damaging agents, the brush layer can undergo various changes. We can talk about cytopathology of the brush border. In some pathological cases, the brush villi layers seem to be fused together, they can become immobile, 16. In the liver,
the bristle layer is replaced by soft villi that cover the upper layer of endothelial cells that form capillary membranes. These filaments, platelets, these microvilli coming out of the endothelial cells of capillaries and liver cells are like a cytoplasmic sponge with a huge absorption surface.

The volume of blood circulating in the liver for an hour and flowing through the portal vein is 100 liters. If you put a heating pad on the liver area for an hour, you warm 100 liters of blood. In 24 hours, 2400 liters of blood pass through the liver. The volume of blood that circulates in the liver for an hour is 100 liters of blood.

17. The surface of the small intestine is also characterized by the accumulation of the thinnest fibers of the cytoplasm, which form a multitude of hollow villi. The combination of all these villi ensures the transformation of food products consisting of dead matter into living grains of cellular cytoplasm.

The length of each villi is 2-5 μm, the diameter is 1 μm. There are about 50 villi in 1 μm There are about 50 villi. Assuming that the area of the outer membrane of the small intestine in humans is estimated at 43 m, the inner absorbing surface of them with the entire volume of the villi should be equal to 602 m.

18. Knowing that in order to preserve the ability to convert food into digestible substances, the mucous membrane of the small intestine must be constantly irrigated with three liters of liquids, it is necessary to review the hygiene of the diet. It is also necessary to think about the origin of constipation and diarrhea. Every time the volume of intestinal juice decreases, constipation is observed; when the volume of intestinal juice increases greatly, diarrhea appears.

19. The total surface area of the skin varies in different subjects between 1.7 and 2.6 m. The approximate number of sweat glands of the skin exceeds 2 million. The number of sebaceous glands is approximately 250 thousand. up to 72% of the chemical composition of the skin.

20. The volume of the sweat glands varies, some of them can reach 3-4 mm (axillary), others do not exceed 0.1 mm.

There are 500 glands per 1 cm of the skin surface; the total surface of the sweat-secreting glands is on average 5 m. The excretory surface of the kidneys - approximately 8 m.

21. Calcium microcrystals, which make up the solid basis of bone tissue, represent an unfolded space of 130 m2 per I g of bone tissue. One kilogram of bone that you put in the soup, is a net to stretch all the layers of bone tissue, the surface into 130,000 m2, compressed by a monstrous, incredible force, inexplicable by the most talented engineers in the world.

Shaking hands with your friend,Find out from time to time that you touch the most wonderful structure, the plan of which and its The geometric scheme surpasses the most remarkable electronic ones devices.

22. Ciliated devices: cilia, flagella, possessing wave-like movements and maintaining constant flickering The oscillations in the two kingdoms, animal and vegetable, are created according to the a single plan of ultramicroscopic structure, unified and identical.

23. Photosynthesis in plant leaves is the first silent phase of animal life on Earth, the first timid soft chord of the grandiose symphony of life.

Electron microscopy confirms the existence of a single plan, completeness in all areas of the universe - in the animal kingdom,

vegetable, mineral, in the celestial space and in the tiny cell, which is a tiny microcosm with its own microbiological structures, animated by the undeniable cellular psychism.

Chapter 3
Human Adaptation to the Environment
The Unknown Supercenter of Regulation

Huge Most of the neurons in the cerebral cortex are constantly receiving innumerable signals: visual, acoustic, tactile, thermal, proprioceptive, etc. time to register and respond with an immediate response, specifically for painful or pleasant sensations, for each aggression from the every little point of the body - and all this with a dizzying speed and mathematical accuracy.

These 13-14 billion neurons are locked in the cerebral cortex, the thickness of which is not greater than 2.5 mm, non-stop, throughout our lives receive continuous stimulation from all specialized cells for transmission phenomena of vision, acoustic waves, gustatory and olfactory sensations.

These billions of cortical cells are at the same time received through synapses interconnected dendrites impulses of other cells located in the cortex, as well as signals from the cells of the cerebellum, oblongata and dorsal brain and from the end of every muscle fiber, every nerve.

If you take into account that the optic nerve alone has millions of fibers, you will understand that this huge mass stimulus, perceptions, messages and orders should be flooded with destroy all activity of the analyzing cells.

Neither sights, nor sounds, nor smells, nor taste sensations, nor even the rudimentary elements of our poor little thought could not be transmitted, registered by the receiving cells in the stun noise, chaos, in a hurricane of vibrations transmitted by brain cells and somatic cells.

How can you preserve even tiny intracellular Grains of memory? How can you keep the will in this raging hurricane, desire, love, hatred, vanity and selflessness? How could to be born, to exist, to continue science, art, religion, music And even our poor medicine?

Modern neurology has long identified various centers in the different points of the brain. There is a speech center, its damage provokes aphasia. There are centers for the movement of arms, legs, breathing, sensitivity. All these centers were opened by comparison of various painful manifestations and their pathoanatomical connection with various points of the brain.

But modern physiologists are blind and deaf to everything that has not yet been discovered, proven, cannot be controlled and determined by microscopic slices. As a result of this microscopic position, the outlook and the concepts of their become just as microscopic. Modern physiologists, histologists forget that Aristarchus is in Hellas and twenty-two centuries later Copernicus discovered the rotation of the Earth without a telescope, only on the basis of his elementary mathematical calculations, before differential the equation was discovered by Leibniz. And yet modern Astronomy and modern astrophysics would be inconceivable without the brilliant the thought of Copernicus, who, instead of using a telescope, used another intelligent telescope - an elementary mathematical logic.

And here is the same elementary logic, whether it is physiological or mathematical, dictates the following conclusion: all the wonders of structure of the brain, the organization of its functions, as well as all our physiological and Psychic life, would be inconceivable without the existence of a higher center in the brain, which prescribes to all brain cells and all somatic rhythmic rest to the cells. This supreme regulatory center acts as a orchestra conductor.

It is possible and permissible that the rhythm of breathing (18 times per minute), the rhythm of the heart (72-75 systoles per minute), diaphragm rhythm (18 excursions per minute), rhythm sleep (8 hours a day) are set by the regulatory center.

It can be hypothesized that eurhythmic (harmonious) rest of various organs, rhythmic interruption of all functions of cellular, tissue, established by the regulatory center, is also applicable to brain cells. But the regulating center itself, as well as each living particle, needs rhythmic rest.

Each accumulation of metabolites not removed from the higher center, each a decrease in the supply of oxygen, each violation of

the harmony of the rhythm must be accompanied by a brain disease. Prof. Klosovsky even showed rhythmic contractions (contractions) of brain cells. There is a a pause, a mandatory rest for each living unit, as for a small cells, and for the organism itself...

Perhaps this is the total amount of rest, this eurrhythmia is prescribed the supreme supercenter. When this dominant center is determined, then will also establish that the anarchy of embryonic cells, their excessive proliferation is caused by the violation of the conductor's vigilance by the orchestra - the highest center.
For us, the existence and role of this center is an axiom. America existed before it was discovered by Christopher Columbus. Cellular Physiology and biological logic lead to this important conclusion. Astronomers find unknown stars first thanks to calculations, and Then with the help of a telescope.

Variety of Different Physiological Regulations and Their Integration

During the For thousands of years, the human and animal organisms have been able to adapt to huge temperature changes. The northernmost peoples living beyond the Polar around, like their deer and dogs, spend their lives and work at air temperature reaching -60 ° C. Bedouins, Indians and others Inhabitants of tropical and equatorial regions live and work in temperatures exceeding +40 °C, while maintaining its temperature body at 36.6-37°. This means that in the central nervous system There is a thermoregulation center, which, according to the indications of neuropathologists, placed in the medulla oblongata.

For several months of the year, the food of the Eskimos is mainly consists of fat and fish that do not contain carbohydrates, which indicates the presence of a special regulation that allows the Eskimos to tolerate the absence of carbohydrates.

With each significant increase in air humidity, the human body is deprived of a huge amount of oxygen, and its pulmonary alveoli filled with water vapor. In England, during fogs (e.g., smog, at which visibility does not exceed one meter) several dies of hundreds of people poorly adapted, but tens of millions remain in which indicates the existence of regulation in the respiratory center medulla oblongata, which allows you to survive in dangerous conditions.

Lack of oxygen caused by a decrease in atmospheric pressure in countries where people live and work at an altitude of 3000 m or more above the level (Mexico, Tibet) should be compensated by special regulation.

Already in ancient times, at the dawn of history, our ancestors were hunters and fishermen - could not protect themselves from shortwave space radiation. Modern physicists and biologists are very well aware of the harmful effects of ultrashort waves. If mankind with perseverance continued to live, it must be assumed that regulation arose in the brain, ensuring our existence and turning toxic rays into harmless to the body. However, it is impossible to assume the possibility of adaptation to technological radioactivity; In this regard, the threat grows and increases every year for all life on Earth. In In the near future, if war breaks out, hundreds of thousands of people will be immediately destroyed, and the rest will remain sick and slow to die as Japanese fishermen died 150 km from Bikini.

Modern technology can easily build a thermostat. Vital Energy without technical tools grants every living being on the throughout his life, a huge number of physiological thermostats.

If all the centers of regulation function normally, then all microbes and Viruses become harmless. Remember the history of all epidemics and especially the history of the epidemics of plague, cholera, the Spanish flu in 1918 and You'll see weird stats that never caught your attention researchers. During cholera and plague epidemics, the number of deaths and the number of cases never exceeded one third of the population.

Medical historians and microbiologists call this phenomenon innate immunity, prefer to enjoy the term "innate immunity".

Let me give you another explanation: this persistence was a consequence of the long-term stability of the structures and functions of regulatory centers. It should be also eliminate the terms "hypersensitivity presupposedlyidiosyncrasy, allergy"; These are the scholastic demons introduced into the Misconception of terminology.

We must never forget the dominant role of body fluids: the role of blood, lymph, outside and intracellular fluid media. Numerous centers of various regulations depend on the normal number of normal composition of fluids that irrigate the centers of

regulation.

More than a hundred years ago, Claude Bernard in his "Introduction to the Experimental medicine" wrote that the stability of the chemical state of the living substances, the stability of their physiological reactions lead us to conclusion about the existence of regulatory factors, Charles Richet confirmed this thought experimentally. Pasteur, shortly before his death, claimed that Soil, environment are everything, microbes are nothing.

According to Claude Bernard, elementary particles. Now we can add: cells live in the internal environment, molecules, ions; all the smallest particles are permeated with vital energy, the most living water. With a biological premonition of science, Russian folklore speaks of living water.

Claude Bernard also spoke about the alkaline reaction in all liquids body (except for gastric juice). Blood, lymph, spinal cord Fluid, like all extra- and intracellular fluids, carries in its flows a complex of colloids with a negative electric charge. The concentration of hydrogen ions fluctuates very slightly in both side of the pH equal to 7.4.

Think again: the amount of albumin in the blood is 60 g/l, which means that Special regulation is needed to maintain this stability. In the blood there are alkaline reserves, like a tampon that protects the blood from acid disorders that can cause death. Without vigilance, vigilant regulation of the alkaline reserve, human life is inconceivable. Sweating regulates body temperature, preventing significant temperature deviations would not be possible without central regulation.

Scarring of superficial wounds on the hands, feet, face is evidence of the "reserve" regulation used by all tissues. S With the help of a microscope, it was established that during the period of granulation in the wound there are epithelial cells randomly "floating" on its surfaces; After a few hours, these epithelial cells begin to Form scar tissue and the wound heals.

It is trivial, but the Comte de Nouy in his work "Time and Life" devoted 50 pages to the scarring process. This process is confirmation of the reserve creative regulation that comes into effect only after mechanical aggression. The scientific world did not pay attention to this work the attention it deserves. This is easily explained, since hundreds of thousands of collections devoted to biology are published annually, physiology, pathology and therapy, and the same number of monographs.

Every time the hematologist finds a normal number in the test erythrocytes, neutrophil leukocytes, normal percentage of prothrombin, he unconsciously states the results of the regulation of the spleen, the bone of the brain. Every time a cardiologist counts the number of heart pulsations, looks at the electrocardiogram, he does not realize that all deviations from the norm must be neutralized by vigilant regulation. Each time a neurologist states a number of pathological reflexes, he forgets that normal reflexes depend on the

The number of regulations is enormous, as is the number of neurons, dendrites, axons. However, The world of regulation is seldom a heroic symphony, a greater partly it is a sad symphony; and if there is a symphony for life, there must also be a conductor of the environment, who ensures the higher regulation: the supercenter. This supercenter has not yet been recognized, but and the radioactivity of uranium existed for millions of years before the Curie I found it.

Chapter 4
Evaluation and Reassessment of Some Problems of General Pathology
Some Problems of Pathology

Let's consider two Aschoff's General Pathological Anatomy (1923) and Abrikosova (1950). Let's start with the pathological-natomical picture of influenza. First of all, you will find a list of the so-called influenza pathogens. Their a lot. At first, the cause of the flu was considered to be Pfeffer's bacilli, then their The place was taken by micrococci, pneumococci, diplococci, streptococci. For In recent years, virologists have discovered more than a hundred varieties various viruses that cause influenza.

Any sane person who has not been hypnotized by scientists terms, will understand that in the presence of more than a hundred pathogens of the disease, he will not One of them cannot be the causative agent of influenza. Availability of a variety of microbes in this case in such a number should be considered secondary biological layering that develops on the soil of the affected tissues and cells whose degeneration is caused by other factors.

During the course of the so-called seasonal Müller flu (Miiller, 1922) and his students established the presence of venous stasis in the predominant the number of capillaries. This venous stasis in the capillary networks easily explains venous hyperemia, multiple embolisms in severe forms of influenza, thrombosis, hemorrhagic infarctions in various organs, among

the complications of severe forms of influenza are the same venous stasis explain postembolic lung abscesses, limited pleurisy, lung gangrene, pericarditis, peritonitis, encephalitis, myocardial infarction.

All of these severe complications are not caused by numerous a squad of microbes, nor a hurricane of hundreds of viruses. The reason has long been established The Tübingen School: acute paralysis of the venous loops of tens of thousands capillaries in influenza. Since the flu began to be treated with antibiotics, he completely changed his character. Influenza is no longer seasonal epidemic, it has become a pandemic in all European and overseas countries, like the plague in India, and is characterized by a reflexive form, like relapsing fever.

In the two works mentioned above, as in all modern pathological examinations, a strange habit can be noted pathologists to consider or interpret postmortem anatomical changes in tissue and cellular structures as a result of the last disease that caused death. This means that Pathoanatomical thought takes into account only the last, 5th an act of physiological drama without bothering to think over the chronology a number of structural changes accumulated in the patient throughout his life until the onset of the last fatal disease.

Pathologists completely ignore or falsely (inaccurately) explain Importance of lymph nodes in the chest cavity in influenza. Nevertheless, These swollen nodules are a consequence of what was suffered in early childhood whooping cough, which affects 90% of children. Pathologists do not come to the observed growth of connective tissue in the lungs and The adhesion of the peritoneum around the viscera is a consequence of diseases long before the last disease. In the same way the presence of bronchiectasis caused by chronic bronchitis long before the death of the patient who underwent an autopsy.

It's time for pathologists to start determining the age and duration of pathological changes in every organ, every tissue, every cell. Pathologists are obliged, like a geologistm, installing, keeping all mathematical the proportions, age and duration of each painful change.

Pathology must become dynamic, it must restore dramatic history of all the morbid phenomena throughout the life. This method will open up new paths, new horizons and new Prospects for Clinic and Therapy.

In the work of Prof. Abrikosov, the number of diseases studied is 190. Taking into account that each disease is accompanied by a number of pathological changes, which in severe cases of the course of diseases pathological changes are also present in a number of other organs, the number of various forms of diseases should exceed two thousand. So big The number of various symptoms can be held with great difficulty in the memory of students and even an experienced doctor.

Let's think together whether this huge number of symptoms can be reduced. We believe this is possible. If in agriculture or horticulture it were necessary would use more than a thousand techniques for growing plants, we they would have lost both vegetables and cereals. In agronomy, four process.

1) Plowing the land with a tractor, which increases the supply of oxygen to the plant roots, creates better conditions for uniform impregnation roots with subsoil water and increases the productivity of soil bacteria that fix nitrogen, which is necessary for the construction of protein molecules in the roots of plants.

2) Rational irrigation, i.e. the supply of a sufficient amount of fluids that nourish the roots due to intracellular microflares, branches, leaves and fruits to the very top of the plant.

3) Care for the stability of the plant (backwater).

4) Destruction of weeds that stifle the growth of cultivated plants (weeding).

Readers familiar with the previous chapter are aware of the significance of various forms of fatigue as the main, main factors for the occurrence of various forms of diseases. We distinguish between fatigue muscular, nervous, acoustic, optical, thermal,

digestive, sexual, intellectual, emotional. For us a person who works normally and is not exposed to a long of any of the listed forms of fatigue, can not get sick. Neither one of the many microbes that fill the nasal cavity, conjunctiva, pharynx, larynx, trachea, large and small bronchi, cannot cause no disease, even in the absence of preventive vaccinations.
There are four main factors that cause a predisposition to diseases.

1) Extremely weakened breathing, i.e. a decrease in the supply of oxygen to the blood, and through the blood - decisively to all organs (general hypoxemia).

2) Decrease in the daily volume of urine, provoking retention and precipitation urea, uric acid, sodium chloride, phosphates, calcium, ammonia. After a while, this delay causes a mechanical irritation of organs, tissues and cells covered and penetrated the above-mentioned non-isolated substances. When their accumulation becomes excessive, chronic poisoning of organs and tissues occurs and cells, which entails structural degeneration and functional insufficiency of systems and organs.

3) Weakening of circulation of blood, lymph, cerebrospinal fluid in the arteries, veins, crovenous and lymphatic capillaries, as well as in the extra- and intracellular fluids. Every slowing of the circulation of breathing, urine excretion causes various forms of diseases depending on the of a greater or lesser degree of preceding fatigue of one or another structural-functional system or this or that organ.

4) A factor predisposing to various diseases is also insufficient assimilation, i.e. a decrease in the ability of the digestive systems to convert nutrients: proteins, fats, carbohydrates and mineral salts into digestible solutions..

The combination of disorders of all four listed systems entails serious illness. The most common combination of hypoxemia is and decreased urination.

Pathology of respiratory tract diseases. Almost all diseases airways in adults are prepared slowly but surely in childhood. Insufficient ventilation in the children's room, repeated Bronchitis causes weakness of the diaphragm, intercostal muscles and little by little lead to a sharp decrease in the supply of oxygen to all organs.

We are obliged to note and emphasize the harmful and dangerous habit of parents and teachers to be frightened by any increase in temperature and lower it medications at the first appearance. An increase in temperature is necessary for destruction of microbes and toxins arising from the breakdown of protein molecules in each cell. An artificial lowering of the temperature causes secondary accumulation of protein toxins, which in turn leads to degeneration of other healthy cells and progressive increase in protein toxins, which paves the way for chronic lung diseases and other organs in adulthood.

Microbes are not the causative agents of pulmonary diseases. They appear after the disintegration of cells, as bacteria appear in decomposing food residues. We observed how not severe respiratory diseases pathways gradually lead to a decrease in the supply of oxygen to all organs. The stage of chronic oxygen starvation begins, which is The main cause of respiratory tract diseases in Adolescence and adulthood.

It should also be noted that a very important role is played among other children's diseases whooping cough and measles. Modern pediatrics is absolutely not is aware that any whooping cough, even in the mildest form, entails prolonged swelling of the lymph nodes, "hypertrophy" lymphatic vessels of the lungs, bronchi, pleura. Proper auscultation makes it possible to listen to them 30-40 years after the onset of whooping cough.

Any artificial lowering of temperature in measles entails paralysis of alveolar, blood and lymphatic capillaries and creates predisposition to chronic and acute diseases of the respiratory tract.

Fellow pediatricians, if you want to save your little patients in future, when they become adults, from bronchitis, pneumonia, bronchiectasis, pleurisy, lung abscesses, pulmonary tuberculosis, - Do not lower the temperature in your young patients, use in Time for measles, whooping cough, flu, hot chest wraps. Thus, In this way, you will achieve true preventive medicine, much more more effective than BCG.

The role of a school nurse would be very usefulIf only she could do it every morning Before the start of classes, she examined the throat of children, establishing the presence of runny nose and removing sick children to avoid mass infection. Coughing, sneezing children should not be allowed to attend lessons. School Doctors should become equal members of the pedagogical

council. With discussing school programs, doctors should insist on the norm of school loads according to age. Think about what simple means It is possible to create a healthy generation. At the beginning of our century, the organization, called "A Drop of Milk", saved tens of thousands of newborns. Several Common sense drops from pediatricians could guarantee health growing generations.

Renal failure. Pathological anatomy studies various forms of kidney disease. There are more than a million in each kidney glomeruli. The glomerulus together with the renal tubule is functional renal unit - nephron. Die of jade when the number of kidney units is reduced by 75%, from 30% it is possible to do something else vegetate.

Each nephron is a tangle of specialized blood capillaries. In all glomeruli, 200 liters of blood pass in 24 hours. If the kidneys are in normal condition, 198.5 L are absorbed back into the blood flow and return to the general circulation of the blood. This is the absorption of occurs in the convoluted tubules of the kidneys, in which amazing, inexplicable by any chemistry concentration of various substances of blood to be excreted. It's a miraculous suction, which is constantly occurring in the convoluted tubules, is produced by chemically precise, in an incomprehensible rhythm, with automatism, not yet explained by modern chemistry. Thus, from the blood of a healthy of a person is excreted into the urine from 0.30 to 0.50 g/l of urea, for 24 hours in 1 liter urine should be excreted 20.0 g. Sodium chloride of the kidneys is excreted from 12 up to 15 g/l of urine in 24 hours, in the blood it is contained in the amount of 0.06 g/l. The kidneys should also excrete 180-200 mg of calcium/liter of urine.

As long as the quantitative constancy of the separation of the above-mentioned and other substances, the kidneys remain healthy. When the excretion decreases, any of the substances after a while there is a lung, moderate or severe kidney disease.

In pathological anatomy, in addition to glomerulonephritis, renal capillaritis, purulent nephritis as a consequence of embolism caused by any other purulent focus or functional irritation (penetration colibacilli, enterococci and streptococci, sometimes leading to paranephritic abscess), and finally, renal tuberculosis. Surprisingly, that in the works of pathological anatomy there is no mention of renal retention mineral salts, and in the ureters and in the bladder - urate, oxalates, phosphates. There is also no mention of the pathogenetic significance of calcium retention, which is the primary factor in the formation of stones in the kidneys, ureters, gallbladder and main gallbladder channel. Calcium retention can cause very severe disorders (deforming rheumatism, ankylosing spondylitis).

Combination of hypoxemia and renal failure. This is the most a significant section of pathological anatomy, clinic, and therapy. Let's get started with pathological anatomy. It contains descriptions of small hemorrhages in the brain, the degeneration of various types of nerve cells and fibers. Pathological anatomy will demonstrate swelling and disintegration of nervesIn this case, the cells, vacuolization of cellular cytoplasm, penetration of fibrin into the cell, petrification (petrification) of cells and nerve fibers.

Smallpox, typhoid, influenza, pneumonia, scarlet fever, erysipelas can accompanied as a complication by inflammation or degeneration brain or spinal cord - encephalomyelitis. Origin - embolism from dead cells of various parts of the body.

When the brain is affected by chronic malaria (neuropalludism), when capillaries of the cerebral cortex and subcortical formations are filled erythrocytes, multiple thromboses of capillaries and arterioles are observed around which necrotic belts of dead cells are formed. This phenomenon can lead to a comatose state of malaria origin.

After listing the numerous factors that cause acute and chronic, diseases of the central nervous system, can be diagnosed The next question is: has modern pathology really solved What are the main factors that cause diseases of the brain and spinal cord?

After the work of Prof. Chauchard (1943, 1951), it became clear the importance of insufficient oxygen supply to the neurons of the brain and spinal cord. At the same time, I managed to finish a long-term work on the study of renal failure. Strange chronological coincidence: in 1951, a remarkable work of the academician was published B.N. Klosovsky on blood circulation in the brain.

His physiological experiments and numerous subtle observations have shown that normal brain activity requires sufficient oxygen supply and removal of harmful metabolic products, located in the blood, lymph and cerebrospinal fluid. This provision fully confirmed by us and our followers in various countries since 1951,

having analyzed the so-called achievements of modern neurology and psychiatry, it must be admitted that, despite the

geometrically accurate topography of diseases of the brain and spinal cord, does not exist rational therapy neither in neurology nor in psychiatry.

In addition to surgical operations, which rarely give a favorable outcome, Vasodilator, stimulating, depressing medications are only consolation for the sick and their loved ones. And many of these medicines are very harmful. But it is in the field of diseases of the central nervous system, the use of balneotherapy and dietary regimens gives favorable results.

Many years have passed since the eminent Russian pathologist Prof. V. Podvysotsky (1905) wrote lines that remain indisputable today truth: "The number of the main types of disease processes, no matter what causes, and in whatever organ they are caused, are very small; however, due to the different mutual grouping of these processes, or due to their localization in different parts of the body, the number of individual The forms of diseases reach an enormous number" (p. 23).

Indeed, the essence of inflammation, necrosis, amyloid, fatty or other degeneration, the essence of thrombosis, poisoning remains the same, in whatever organ or part of the body these processes.

Thanks to the data obtained with the help of an electron microscope, our Understanding the structures and life of cells has expanded significantly, and we TWe should be aware that purely drug treatment unable to change the finest structures of various parts of the cell; We are deprived of the opportunity to directly combat the functional disorder, we can only create conditions for self-healing diseased cells, as is done in agriculture and gardening.

Venous congestion, infections and germs

If you enter subcutaneous or intramuscular egg white extract or sterilized milk, then you can cause a local infection. Repeating this injection several times, we will get a mild or severe disease, depending on the the number of injections. This is a common infection. However, when eating milk, and eggs for years and decades, a person does not get sick. In both cases the human body receives the same albumins, the transformation of which into protein molecules can cause poisoning with protein toxins.

With a normal diet, protein toxins are neutralized by juices digestive tract, countless enzymes and bacteria, living in the intestines. Dead nutrients miraculously are transformed into vital energy and miraculously restore part of the cytoplasm of cells, i.e. the living structures of the human body.

Each damage to the mucous membrane is accompanied by penetration into the wounded microfoci of microorganisms. Microbes are permanent inhabitants of the sinuses, mouth, pharynx, esophagus and large intestine. Great minds - Pasteur, Mechnikov, Bezredka - established as indisputable truth recognized by pathologists and clinicians, the following law: "Not There is an infection that is not caused by germs."

But Pasteur said on his deathbed: "Microbes are nothing, everything is decided by the environment (soil)". This means that the state of the body determines the effect of the encounter organism with microbes. Pasteur's famous experiment confirms this. He infected chickens with chicken cholera bacteria. Half of the hens whose legs are on For some time they were placed in cold water, fell ill and died. Other Half of the chickens received a hot foot bath and did not get sick.

A cold foot bath is always accompanied by venous stasis, causing an increase in the volume of venous blood and a decrease in the volume of arterial blood. The latter is naturally accompanied by a decrease in the volume of oxygen supplied to all tissues and organs, as well as a decrease in the secretions of the end products of metabolism accumulated in the blood, lymph and in extracellular fluids.

Hot bath applied to chicken feet, as well as hot foot baths for humans, increases the flow of arterial blood and thereby increases the the influx of oxygen to tissues and organs, contributes to the removal of waste life. The same principle contributes to the healing of many severe infectious diseases (through the use of hyperthermic baths). However, human life is different from that of a chicken. Passed more than a hundred years after Pasteur's famous experiment, but bacteriologists have not bothered to repeat it.

In local limited inflammation, protein toxins and other antigens are destroyed by phagocytes. With a general infection (intoxication), the body mobilizes all its energy reserves, causing an increase in fever, a life-saving fever, like an incinerator, destroying all harmful substances circulating in the blood, lymph and extracellular fluids. Therefore, it is never necessary to

artificially lower high fever. (If the temperature exceeds 40°C, you should put a bubble with ice on the back of the head and 2 times a day do hot chest wraps).

If venous congestion forms quickly, if at the same time in the blood there is an accumulation of fibrin fibers, then either thrombosis or croupous pneumonia. If venous stasis occurs slowly, tabout all conditions are created for the formation of necrosis. Only in these conditions it becomes possible for microbes to penetrate and multiply into the previously dead foci.

Bacteriologists consider the invasion of microbes and viruses as the root cause of the infection, we believe that without previous venous stasis, without necrosis of the mass of cells infection impossible. Just like in an old quadrille, germs and infection change in places. And this movement urgently requires rational change therapeutic techniques used in the treatment of each infectious disease diseases.

Instead of immunizing the body with vaccines, instead of Lower the temperature with antibiotics, first of all, it is necessary to release the body from venous stasis by hydrotherapeutic techniques (hot wraps and a range of baths). The warmth offered by wraps and causes the opening of countless closed skin capillaries, frees the body from venous stasis, destroys microbial flora, causes the disintegration of necrotic foci and the excretion of their products. Phagocytes, agglutinins, lysines, always present in blood plasma, provide its complete cleansing, as well as the cleansing of lymph and other body fluids.

Despite our more than 60 years of medical practice in five European countries, despite 40 years of histological and clinical research, we foresee, not without reason, that our concepts will be are accepted as a priceless heresy proposed by the amateur science fiction. Nevertheless, we want to present our future critics some of the evidence collected in the world scientific literature.

I suggest that you familiarize yourself with the outstanding "Treatise on the Pathological anatomy" prof. L. Aschoff: "After an in-depth study of venous stasis, we found different correlations between venous stasis and infection. Factors that cause large venous stasis generate infection; Hard to establish the boundary between infection and venous stasis" (Aschoff, 1923, p. 44). This timid statement, printed in small print, is difficult found on 2000 pages of an extensive treatise.

Venous stasis is always accompanied by a decrease in the volume of arterial blood and a sharp decrease in oxygen inflow. General hypoxemia reduces the energy balance of the body, slows down all biochemical reactions. In the lungs, hypoxemia is accompanied by an increase in carbon dioxide. The walls of the veins expand and lose their elasticity, the coronary arteries do not receive enough oxygen, and neither do the cells myocardium and endocardium. If the state of hypoxemia lasts for a long time, then myocarditis, endocarditis, myocardial infarction may develop.

Venous congestion in the abdominal cavity is accompanied by cerebral anemia. He It is observed in peritonitis in chronic alcoholics. Venous congestion slows down due to compression in cases of tumors, cirrhosis of the liver, purulent or serous pleurisy, with heart valve defects. These are is explained by the fact that venous circulation is stimulated by cardiac systoles and diastoles, diaphragm movement, as well as venous valves.

Chest immobility (Marie Bekhtereva's disease), pericarditis, increasing venous stasis, accompanied by a decrease in arterial blood pressure, weakness and sharp weight loss of the abdominal muscles. Prolonged venous stasis causes thickening of the capillary endothelium, overgrowth of connective tissue. The latter, forming scars in different organs, displaces or replaces specialized cells. In depending on the location of the lesion, this leads: in the kidneys - to nephrosclerosis, in the lungs - to pneumosclerosis, in the brain and spinal cord - to multiple sclerosis, in the skin - to scleroderma, in the liver - to cirrhosis.

After tongue ligation in laboratory animals in the first phase, slowing of blood flow followed by diapedesis (release of red blood cells into the intercellular spaces through the capillary endothelium). The same phenomenon observed in any part of the body of experimental animals, if the area under study is cooled to a temperature of -7 °C or overheating at a temperature of +46 °C. Experimental extension venous stasis in the second phase, numerous punctate hemorrhages, followed by the formation of necrotic foci. After the appearance of necrotic foci, the gate for invasion and reproduction of microbes.

And now allow me to present other testimonies of major scientists and researchers whose works have been published in scientific periodicals. The predominant importance of the volume of fluids in the human body, their role in the stability of anatomical structures, in the balance and rhythm of all functions of the organism had already been predicted by the eminent pathologist Konheim (Cohnheim, 1877). Kongaim's ideas were developed and expanded by Prof. Gregoraci (1927), who believed that microbes were constantly located in the sinuses, in the mouth, in the throat, on the skin, do not manifest themselves and do not

multiply until cells, tissues, organs are exposed to preliminary disintegration. Prof. Villemain, cited Gregoraci noted that our therapeutic and preventive efforts should be oriented in two directions:

1) to reduce the virulence of microbes and their reproduction;
2) to strengthen the body's resistance.

Prof. Woes, also quoted by Gregoraci, presented a great the number of cases of self-recovery from cavernous tuberculosis. Prof. Billroth, the famous Viennese surgeon, was convinced that the microbes do not have enough vital energy to destroy normal tissue. Here I would like to express my profound Thank you to my great friend, the tireless researcher Dr. Mancini, who drew my attention to the excellent work of Prof. Gregorachi. This posthumous meeting helped me a lot and contributed to the my efforts to coldly analyze such burning problems.

Dr. René Dubos (1961), living in the United States, published the remarkable work "Mirage of Health", characterized by the most extensive erudition and amazing clarity of mind. Let us introduce the reader to his main ideas. He believed that only modern medicine one form of the disease can be eradicated, and the other disease is immediately destroyed takes her place. There is no disease that can be caused by a microbe: it was not Koch's bacillus that was the causative agent of progressive Tuberculosis epidemic, which raged in Europe in the nineteenth century, was only a consequence of the The Social Tragedy Caused by the Industrial Revolution: Mass resettlement from villages to industrial centers, where workers settled in the urban slums, lived and worked in the most terrible conditions... Workers spent long hours of exhausting labor in a suffocating atmosphere coal mines... Child labor was exploited..., food in the cities It was bad.

Lack of even the most primitive hygienic conditions, Lack of nutrition, lack of sun and light created a complex of factors thousands of times more destructive than the tuberculosis bacillus. The animal body, like the human body, even the healthiest, always It is a carrier of viruses and microbes. Destroying dangerous microbes, at the same time, they destroy microorganisms that protect our health. The fight against microbes leads to the destruction of beneficial microbial flora intestines.

Epidemics of leprosy, typhus, and plague disappeared in Western Europe before the emergence of microbiology. In 1960 in the United States, despite the high level of life, each inhabitant spent 10% of his earnings on treatment. There is even On the street, you could buy from a machine for 5 cents arousing or sedatives, often very poisonous.

A quarter of the U.S. population tries annually for two to three months to carry out mental rest and restore mental balance in psychiatric hospitals.
Laboratory animals raised in absolutely sterile conditions, everyone dies without exception, coming into contact with microbes that exist in a normal environment. These animals lose their ability to respond to infection by mobilizing all their defensive reactions, as opposed to animals accustomed to living in symbiosis with microbes.

From this we can conclude that it is necessary to come into contact with the microbes to adapt to the inevitable symbiosis. Antibiotics, destroying a certain race of microorganisms, create favorable biological conditions for the development of other types of microbes. Microbiology becomes its extreme micromythology!

Pasteur in the last years of his life argued that the degree of resistance of the human organism depends on its heredity, on its nutrition, from the social environment surrounding it, from the climate, as well as from the his mental state. Pasteur considered the microbe as one of the factors among many others that can cause infection.

At the time when Robert Koch published his famous report on the bacillus tuberculosis, almost all residents of the cities of Western Europe were carriers, but only a minimal percentage of the population was affected in that or other forms of clinical tuberculosis.

In 1900, the famous hygienist Pettenkofer in Bavaria and no less the famous Mechnikov in France, as well as their disciples, decided to take a risk with your own life, to conduct a kind of experiment. They swallowed the crops vibrios of cholera, taken from the intestines of patients who died of cholera. In excrement (feces) of these scientists, a huge the number of cholera vibrios, some of the experimenters developed mild diarrhea, but ingested microorganisms did not cause any cholera.

After Pettenkofer, Mechnikov and their students, there were others, very bold experimenters who swallowed billions of dysentery bacilli in conditions that contributed to the development of infection. To increase the chance diseases even reached the point that

they swallowed wafers with feces patients with severe bacillary dysentery. Most of them are not experienced even the slightest indispositionIn the 19th century, the
During the winter of 1952-1953, 4 days of fog in London entailed death of 5000 patients. In our opinion, this extraordinary mortality was caused by a sharp decrease in the volume of oxygen in the atmosphere and the accumulation of radioactive particles in the air.

Dear readers, read the exciting book by Dr. Dubos, On p. 130 and 132 you will find his reflections on "magical action" modern medicines. Dubos explains the expansion of antibiotics, sedatives and stimulants by the "collective hysteria" of doctors and patients.
We do not deny the usefulness of antibiotics in the treatment of meningitis, but we affirm that most infectious and chronic diseases can be treated without complications by balneotherapy methods. In the following cases: of chronic diseases, modern medicines are only moral consolation paid for by subsequent complications of the disease.

The great epidemics of the past were caused by the lack of hygiene, they disappeared on their own without medication and treatment, as the standard of living improved. We are currently witnessing increase in cardiovascular and cerebral diseases, malignant tumors; The number of mentally retarded children increases in catastrophic proportions in all civilized countries. References to the works of a number of scientists who share our views on the role of which is played by venous congestion in cases of the development of various infections, can be supplemented by observations collected under stressful conditions: in the quiet atmosphere of some laboratory or in the faculty room clinic, but in the purgatory of numerous concentration camps Hitler's Germany.

In 1958, Prof. Charles Richet, a member of the French Academy of Medicine and Dr Mans, Inspector General of Health, Member of the of the Medical Academy published a work entitled "Pathology prisoners of Hitler's torture chambers." These two famous authors shared the fate of millions of internees sentenced to a slow death, incessant harassment and torture. Despite the terrible living conditions, these two investigators retained clarity of thought for observation, records of everything that happened around them and eventually came to valuable scientific conclusions.

In particular, they noted the effect of cooling and subcooling on the development of many non-communicable and infectious diseases. Thus, on p. 36 reads: "Cold was also one of our worst enemies, and From November to April, most of the prisoners did not have an hour opportunities to keep warm, even at night." And further on page 38: "So, the cold is the most important, even decisive, reason for the emergence of a huge number of infections, including pneumonia, pleurisy, erysipelas inflammation, nephritis".

And what are the consequences of prolonged cooling? Venous stasis! A What are the consequences of venous stasis?

1) A significant increase in carbon dioxide in venous blood;
2) an increase in the volume of venous blood and a decrease in the volume of arterial blood blood;
3) a decrease in the amount of oxygen in cells, tissues, and all organs and an increase in the volume of carbon dioxide throughout the body. These are hypoxemia and intoxication with too much carbon dioxide.

Reproduction and invasion of microbes normally living in the respiratory tract and on the skine, become possible only at a certain stage hypoxemia and a certain degree of carbon dioxide poisoning. Microbes Only affected or dead areas are attacked. We highlight only one thing An exception for the occurrence of malaria and syphilis. To this question, we Let's come back in the future.

How to organize measures to combat venous stasis? Hot water bottle on the liver area reduces venous congestion in the liver and in the entire area, irrigated portal vein. In the case of cirrhosis of the liver, it is necessary to adhere to fruit and vegetable diet, every two months put leeches on the area liver. Hot chest wraps are reduced or removed venous congestion in the lungs, pleura, and myocardium. A range of hyperthermic (never exceeding 42 °C) is an effective means for reduction of general and local venous stasis.

We are currently observing the predominance of the following diseases: influenza that has become a pandemic, chronic bronchitis, bronchial asthma, pneumosclerosis, nephrosclerosis, myocardial infarction, stroke, occupational dermatitis, eczema, various tumors (cancer), renal insufficiency. In France, there are 1.5 million retarded children whose condition can be improved. It is possible to achieve the recovery of millions of patients, without resorting to modern medicines, to operations.

How many healthy children have diphtheria bacilli in the oral cavity and pharynx, how many healthy children can be found with typhoid bacilli and dysentery in the gallbladder! Microbiologists have dubbed these subjects "bacillus carriers". The question of physiological mechanisms of this curious phenomenon. Is it necessary to conclude that "bacilli scientific curiosity" are not contagious enough and do not affect bacteriologists?

We must not forget that without microbes fixing nitrogen on the roots of plants, plant life and animal life would be impossible; that a certain the race of microbes must be considered as the custodians of the sources of life on Earth.

The incubation period is considered to be the first phase of the infectious diseases. For me, this is the degree of previous fatigue, accompanied by a decrease in oxygen supply in combination with accumulation of harmful substances in body fluids that provoke cell damage and "calling" microbes to appear already in the role of gravediggers. A huge number of cells die, and their microcorpses In the process of decomposition, the amount of protein toxins increases precisely in At this point, microbes are always in the body and begin to reproduce. And nevertheless, there are a lot of painful states develop without any microbial intervention. A namely: a series of cardiovascular diseases, almost all diseases brain, neuritis and neuralgia, asthma, Graves' disease (thyrotoxicosis), epilepsy, glaucoma, cataracts, etc.

If preliminary fatigue is insignificant, the infection will not manifest itself; if the degree of preliminary fatigue of cells, tissues and organs is not too much great - the sick will recover; if the accumulated fatigue is too much great - the sick person will die.

Microbes that quietly live in the human body penetrate into the blood, are carried by the bloodstream and can be fixed and multiply only in the pre-tired organs. Changes that are observed in the lymphatic vessels, the appearance of characteristic films on the tonsils in throat with diphtheria, hepatization of lung tissue during pneumonia - all This is not the result of the activity of microbes, it is the result of the action of the body's defenses. This is the fixation of microbes in the lymphatic vessels, for example, in typhus, this is an overgrowth of fibrous threads that cause thickening of lung tissue during pneumonia, such as the fixation of microbes is detected on films in diphtheria.

Observing for more than 50 years in various hospitals and clinics of the medical Faculty of Infectious Disease Development, Comparing Stories diseases with the data of the pathological report, we began to collect literature documenting the role of physiological and pathological fatigue.

It can be argued that the role of fatigue is completely ignored in pathogenesis of infectious diseases.
Alternating periods of elevated temperature with periods of normalization did not receive an acceptable explanation. The discovery of pneumococcus did not bring Nothing new in the explanation of pneumonia. As in a matter of hours pneumonia occurs and then after 7, 9 or 11 days unexpectedly, there is a massive "thawing" of the lungs, like alveoli, Bronchioles and bronchi are freed from fibrin fibers in 3-4 hours and give The ability of the patient to breathe easily? Clinic and bacteriology are silent.

The same microbe provokes different diseases. Can we talk about microbial specificity, if the same microorganism is able to cause septicemia (often fatal) or a small boil cured in A few days?

Every excessive fatigue causes venous congestion. Each venous stagnation opens the door of infection. Let plain water settle in bottle within 15 days, a film of mold will appear on its surface. If you put this mold under a microscope, you can see numerous microbial flora.

The same phenomenon, of course, is a consequence of venous stasis. Complete Venous stasis is found only on cadavers. Local, Limited Stagnation is compatible with life, but slowing venous flow predisposes to infection.

The evolution of each disease unfolds like a movie: changing landscapes, i.e. numerous transformations by which Cells and tissues are exposed. These transformations cannot be explained Only one reason - a bacterium or a virus. Such a biological Unitarianism should have no place either in the clinic or in pathology.

The therapy of various infectious diseases is dictated to the attending physicians microbiologists. The clinic accepted this position with a strange light-mindedness. From time to time, there are timid protests from clinicians, warning of the dangers of new medications. Most doctors obediently follow the instructions of bacteriologists and biochemists. Latest have extensive knowledge

in the field of laboratory reactions experimental animals. Various bacilli are vaccinated in large doses rabbits, dogs and rats that live, feed in conditions unthinkable for the human body. Possessing very mediocre clinical knowledge, bacteriologists, nevertheless, prescribe to the clinic therapy.

Is it conceivable to suggest to a historian, even one who is very famous in his field, conduct classes in astronomy?

Edema, brain (hydrocephalus)

Cerebral edema It is often observed in preschool children. If the child is 3-4 years old You ascertain the volume of the daily amount of urine that does not exceed 200-300 ml, instead of 800 ml (normal discharge), if you find swelling of the ankles and back of the hand and fingers, if A little sick person screams at night for months, years, depriving everyone of rest family members, if at the same time you establish very weak breathing in the lungs, you will have a case of pathological overflow of the cranial boxes of stagnant fluid that compresses the meninges and brain.

If the rhythm of breathing is intermittent, this indicates compression of the oblongata brain and respiratory centers. The etiology is almost always the disease kidneys in the mother during pregnancy, poisoning of the fetus during intrauterine life intoxicated with the mother's blood. Treatment: leeches for the ears every 2 months, fruit and vegetable diet, hot wraps chest, baths with hay infusion, 3/4 liters of milk per day.

If in another case you observe symptoms of St. Vitus's dance in a child with very sharp and frequent involuntary twitching of the limbs, If in the urine test, in addition to reducing its volume, you find a delay calcium discharge, cerebral edema complicated by pressure calcium grains on the meninges. Pediatricians are rarely interested the volume of urine excreted per day. In France in 1963 it was one and a half million defective children, of whom, we are sure, there would not have been a single one whose daily urine intake would be normal. Treatment the same as in the previous case. After a series of baths with senna infusion dust should be made yellow superheating turpentine baths for dissolution and excretion of calcium molecules deposited on the meninges.

In the first and second cases, the disease is often complicated by aphasia or loss of balance, or throwing the head back (opisthotonus), or atrophy of the muscles of the limbs. All these painful phenomena disappear or significantly weakened if our treatments are applied in for several months. The so-called re-education is nothing gives. It is necessary to re-educate educators.

Hydrocephalus is an excessive accumulation of clear or cloudy fluid in the ventricles of the brain. The amount of excess fluid can reach 5 liters. If treatment is not started immediately, the disease will lead to brain atrophy. Leeches for the ears every 2 months, fruit and vegetable regimen, yellow turpentine Baths used in the early stage of the disease can give a complete recovery. Excessive accumulation of cerebrospinal fluid in the The spinal canal can be the cause of syringomyelia. At any cerebral edema, the distance between the cerebral capillaries and neurons. Normally, the distance between the cells of the cerebral cortex and capillaries, according to the calculations of Prof. B. Klosovsky, is equal to 25 μm. With cerebral edema, this distance increases, and therefore decreases oxygen supply and the accumulation of unreleased waste increases. Cerebral The cells are fixed and intoxicated.

Think about this relationship between the brain, lungs and kidneys and you you will understand how wretched modern neurology and psychiatry, which do not know and those who do not want to notice this fatal dependence. Fragility of the brain is compensated by the most miraculous defense mechanism. In the following cases: hyperemia of the brain, increased venous circulation of the blood comes into play through powerful intracranial veins; Outflow of venosisblood in cerebral hyperemia can be increased from 3 to 6 times. At the same time, it increases outflow of cerebrospinal fluid in the lymphatic capillaries and in the enlarged lymphatic trunks.

With cerebral anemia, there is an increased blood flow into the ring of Willis. With stagnation of venous blood in the area of the portal vein, anemia is observed brain, the same cerebral anemia is observed in Biermer's anemia, in leukaemia and rapid puncture for ascites, and when removing a tumor from the abdominal cavity. Note that with a normal Only 1/4 of the blood volume is in the abdominal cavity. Anemia in various areas of the brain leads to its softening and death brain cells.

In acute nephritis, when the volume of urine excreted is very small, Simple or toxic cerebral edema is observed. Brain cells in edema swell, as well as nerve fibers. Inside the brain cells, vacuoles (voids). Hemorrhages are most often caused by increased blood pressure, sclerosis of the kidneys, strong mental emotions, as well as very strong muscle tension, excessive contraction of the abdominal muscles.

In this case, damage to arteries, arterioles, capillaries, less often - veins. At autopsy, microscopic capillary aneurysms are found and arterioles, which did not cause any trouble during life. Without degeneration of the walls of small and minute blood vessels of the brain hemorrhage could occur. And the degeneration of the walls of blood vessels is caused in most cases by anoxemia and intoxication as the consequences of harmful substances not excreted by the kidneys.

My dear colleagues, if you have the opportunity to be at your bedside a patient who has just been stricken with cerebral hemorrhage, immediately put leeches behind his ears, give him only fruit juices - and your patient will not have paralysis and he will be able to get to your feet after 14 days of complete rest. Without timely correct intervention, the patient will remain paralyzed and lose ability to work.

If you have a patient in front of you, who has been affected for quite a long time paralysis, you can still organize an effective treatment: hot chest wraps, salt-free fruit and vegetable regimen, yellow turpentine baths, which promote dissolution and excretion particles of coagulated blood from the intracranial region, decompose and eliminate the corpses of dead brain cells. You will be able to apply this method, to achieve great success.

The doctrine of the impossibility of replacing dead neurons with newborn cells of the brain is a tragic misconception of modern neurology and psychiatry. Drug treatment of paralysis after cerebral hemorrhages does not give any results. Prof. Lazorthes (Lazorthes, 1956) wrote that the pharmacological treatment of disorders of the brain circulation is a confusing page. There are few drugs, the action of which would not be contradictory, since The organization of pharmacological research is carried out in very different conditions.

Descriptions of most of them are extensive and contradictory, although far from being full. The uncertainty of pharmaceutical dynamics is shared by physiology, which adopted its technique and recognized the same doctrinaire disputes. Let's say Simply: medications are powerless and often even harmful in disorders cerebral croConversions.

Eclampsia

Thousands of pregnant women die annually during attacks of eclampsia. The latter is characterized by severe convulsions that can cause death. Autopsies find hemorrhages and foci of necrosis in the liver tissues, punctate hemorrhages in the brain, fatty degeneration of epithelial cells in the kidneys, multiple thromboses in the renal glomeruli, embolisms consisting of giant cells of the placenta. Pathologists explain these phenomena as the penetration of fetal cells into the veins of the mother.

The origin of eclampsia is unknown.
At the same time, they talk about dilation of both ureters, retention and reduction in the daily volume of urine, edema of the extremities and, quite often, cerebral edema. Every time pathologists discover a number of changes during an autopsy, they would be obliged to establish a hierarchy of these changes.

They should understand that the most important factor is a pronounced bundle deficiency, which from time to time causes the retention of poisonous substances in the blood, lymph and cerebrospinal fluid.

Obstetricians, neurologists, urologists must realize that every pregnancy is accompanied by a significant increase in metabolism; an increase in metabolism must in turn be accompanied by a more rapid excretion through the kidneys. When the amount and volume of these harmful substances in the blood and lymph exceed a certain limit, when the body's defenses cannot eliminate them (with the help of phagocytosis, increase in the volume of urine per day), eclampsia occurs. Vomiting is often observed in the first 3 months of pregnancy. We have not found an explanation for this phenomenon in the medical literature. For us, this is pre-eclampsia.

We consider vomiting in pregnant women as the elimination of poisonous substances that are not excreted by the kidneys through the digestive tract. It is possible to avoid the death of pregnant women from eclampsia if obstetricians required a complete urinalysis. In establishing the retention of urea, uric acid, sodium chloride, obstetricians and urologists should prescribe a timely milk-fruit-vegetable regimen, rinsing the kidneys with enemas with baking soda and hydrotherapy in accordance with the condition of the skin.

It is time to put an end to this dangerous intellectual color blindness of obstetricians and urologists. Starting from the 2nd month of pregnancy, it is necessary to do a urine test (complete!) and thus avoid the danger of eclampsia in your clients.

Medicines (their history, the dangers of modern therapy)

During the For thousands of years, mankind has been relentlessly searching for a cure diseases, deliverance from physical and moral suffering. Each Civilization, even every stage of civilization, is looking for and finding medicines according to the degree of knowledge in the field of natural sciences and clinics.

But when studying the pharmacopoeia for many years, you have to to state that in every era therapeutic means are taken a mass of people in an atmosphere of mythomania, and medical corporations - with naïve gullibility. Our era is no exception to the rule.

Dear readers, I invite you to take a journey with me: together We will briefly visit the pharmacies of the civilized world for the last 30 centuries. A thorough study of indisputable historical documents will replace personal contacts.

Fast forward to China in 2700 B.C. pharmacopoeia of that era, on a par with minerals such as borax, alum, mercury, excrement, various secretions, skin and perishable animal remains. For the Jews, an effective means of healing was prayer. In Egypt, the Hébert papyrus in 1352 BC in the era of Ramesses has more than 700 different medicines, some of which have been used Only with the arrival of the great Greek physician Hippocrates, 400 B.C., codifies a clear, simple and effective training. More than 200 drugs are mentioned in Corpus Hippocraticum. His work was published 100 years after his death. Hippocrates has already spoken of more or less dangerous mixtures of medicines, considering their use as a criminal act, to which he himself I have never resorted.

When Alexandria becomes a great intellectual center, among the popular medicines of that era we find the brain, the bile of the camel, the excrement of the crocodile, turtle blood. It should be noted that it was in Alexandria The medical art was divided into three branches: dietetics, pharmacology and surgery.

The Middle Ages were marked by a return to mystical medicine. Christian virtue replaces poor therapeutic knowledge. Spells clergy, the exorcism of an evil spirit are side by side with the practice of magic and magic. In the era of the Averroes (about a millennium) in pharmacopoeia of the great bishop of Baghdad we find red mercuric oxide, hydrochloric acid, lapis.

In 1608, Beguin discovered Calomel, Glauber - sodium sulfate. Secret means. Magic is in full bloom. They are fond of amulets, talismans, Ruby has a reputation for protection against plague and other diseases.

In the XVII century, chrysotherapy (treatment with gold) was prescribed in any form: gold powder, gold in oil, gold drinks, chickens, stuffed with gold. In 1920, classical medicine again introduced arsenal of this very dangerous therapy. The madness of the seventeenth century turned out to be completely forgotten, and for almost 20 years it was possible to observe unfortunate patients with pulmonary tuberculosis and bronchial asthma, eczema, provoked by this therapy, while the underlying disease is not cured. In the same XVII century, it was believed that moles and worms could to cure neuralgia, the swallow's liver protected from marital infidelity, excrement was part of many patches, and urea It was used in the form of compresses in the treatment of rheumatism.

Us They will say - this is the past, now the pharmaceutical industry spends hundreds of millions on animal experiments, on clinical inspections. Doctors, like patients, feel confident, too confidently! Effect of the drug tested on a rabbit or dog is modified on healthy subjects and does not manifest itself in the same way in healthy and sick person. The latter can always manifest unforeseen reactions. When a medication is prescribed, It is always necessary to think about what changes it will undergo under the influence of gastric juice (solubility, oxidation, saponification, hydrolysis advance alternately). Combination with fats and proteins increases or reduces the toxicity of the drug.

The liver, muscles, myocardium, and brain can record the active principle; Renal or hepatic impairment may cause accumulation medication in the body.

Nowadays, most medicines are the monopoly of factory laboratories. Intricate names give only a hint of one of the components

parts of the content. At a colloquium of the Paris Medical University It was estimated that 15,000 medicinal drugs! However, according to well-informed sources, this number is much larger. Is it possible among such of the variety of medicines, which continues to increase, to choose A real, suitable remedy in this individual case?

It is necessary to say and repeat that for a doctor who is aware of his responsibility, this choice is impossible. After all, it is still unknown The mechanism of action of even such a common drug as aspirin.

Therapy is flooded with industrial pharmacology. Its amount kills the quality of patient care. Here is one of the many conclusions of some French clinics. The question is raised about sedatives, stimulating, painkillers, about their abuse and about the danger of modern therapy. The abuses are undeniable when you think that in France 400 tons of medicines are absorbed daily. The United States has recently celebrated the release of the 500,000th drug; 75% of those consumed today were still unknown 10 years ago (Escoffier-Lambiotte, 1962).

Heart and vascular diseases, cancer and leukemia, organic disorders and Viral infections are now infinitely more frequent and are the most common causes of death. 500,000 medicines! Is it possible Can you imagine a locksmith who uses 5000 tools in his work? A surgeon who uses 100 instruments during surgery? Think about it and you will realize that this is impossible, and you will also understand that 99% medicines swallowed daily by patients are useless. Unfortunately, Some medicines are also very dangerous to health, in which it is possible to make sure by reading the scientific journal of the postgraduate education, which has collected the testimonies of many clinicians.

For example, Dr. Bour draws the attention of doctors to cases caused by too long use of intramuscular injections of heparin. Exceeding the established limit, cerebral hemorrhages can be caused, hemorrhages in the digestive tract or hematuria. Some Drugs used in the treatment of rheumatism are very toxic and provoke phenomena accompanied by cyanosis of various types hemorrhages up to anemia and agranulocytosis. Pyramidon causes progressive growth of gast-roduodenal ulcers.

Chlorpromazine or lagracin often cause jaundice and orthostatic hypotension. In addition, the use of lagracin in large doses between the 10th and the 15th day of treatment can cause Parkinson's syndrome. Tofranil is able to cause an epileptic seizure, fear, or depression, which can drive the patient to suicide. Rauwolfia, reserpine often are accompanied by depressive manifestations, as well as the formation of gastroduodenal ulcers.

When a sensational reduction is achieved with the help of antibiotics temperature during infectious diseases, forget that the increase in "burns" harmful substances and that a sharp decrease in its temperature often entails the development of chronic disorders. From the works of the doctor Royer, we learn that intravenously administered calcium supplements, excess vitamin D, ultraviolet rays can provoke renal colic and deaths from calcium intoxication (numerous cases in children in London). Aspirin can cause ulcer perforation stomach, the same can be said about glucocorticoids. Her Painless evolution can end in death.

Aspirin never caused hemorrhages until the era of antibiotics, cortisone and modern antirheumatic drugs; It can be assumed that aspirin becomes capable of causing hemorrhages in part of the population, that has become sensitive as a result of allergy provoked by modern medicines.

Currently, hemorrhages without any confirmation X-rays have become very frequent, since modern The medications disrupted the resistance of the vascular walls. They talk about predisposition to stomach ulcers. This is not true. This is the result of continuous intoxication with modern drugs.

According to some authors, glucocorticoids can cause chronic jade. As for me, I think that jade already existed before the use of medications, but since a complete urine analysis is not performed, then it remained unrecognized, and cortisone only exacerbated and complicated it. Long-term use of cortisone can cause inflammation of the adrenal glands.

Complications due to hypscortisonism include hyperglycemia, diabetes-like, osteoporosis and spontaneous fractures.

Dr. Levral and Dr. Lambert in the introduction to their Amazing work is offered a combination of antibiotics with corticoids. To reduce the effect of drug aggression, it is proposed add to it another drug-induced aggression and thereby double danger of intoxication! To explain the complications, they resort to the help of allergies and anaphylaxis, instead of looking for renal insufficiency and haphjsemia, Serpasil and Tofranil may also lead to to a decrease in blood pressure due to myocardial weakening. In patients arteriosclerosis, tachycardia is often accompanied by hypotension, so Such treatment is contraindicated

for the elderly. Forgetting about somatic effects, created a chemical straitjacket!

As we can see, honored doctors found the courage to sum up the results dangerous effects of new drugs, they raised their voices against the daily mass poisoning, against the ever-increasing number of allergic diseases.
Who will be wise and listen to them?

Statistics

In medical The press, magazines, and articles often talk about huge achievements modern medicine. Members of all medical academies are convinced that Over the past decades, medicine has become more scientific, more effective, that medical education has become more profound and extensive.

Among the many types of anesthesia (alcoholic, opium, etc.), there is also anesthesia of work. Honest, financially disinterested people are anesthetized by their own efforts in work and are unable to to evaluate the true significance of their work as a specialist. They have neither time, nor the desire to sum up his scientific activity. These are Quite a sad truth.

In the United States, where the specialization of doctors has reached its extreme limit, where The number of new medicines is constantly growing, where surgeons replace Living Organs with Artificial Substances, President of the Academy of Nutrition in In New York, M.K. Martin published a report on the number of chronic patients In 1958

, these figures were: 20 million people with allergic diseases, 15 million deaf, 300,000 blind, 1 million glaucoma patients, 16 million patients psychosis, 3 million imbeciles (morons, oligophrenics), 1.5 million epileptics, 10 million patients with atherosclerosis and heart disorders, 10 million patients with arthritis and arthrosis, 1 million diabetics, 700,000 patients with malignant tumors, 400 000 tuberculosis patients, 8.5 million patients with gastric and duodenal ulcers, 100,000 patients with muscular atrophy, 4 million people suffer from the consequences of alcohol intoxication and 32 million from obesity.

This report does not include the number of people suffering from liver disease, biliary tract, prostatitis, hypertension, etc. unjustified euphoria of academics! 120 million patients for a population of 170 million!

It is possible to adapt to the acoustic fatigue provoked by the radio, to the visual, caused by television. But it is difficult to adapt to nutrition canned food, sleeping pills, stimulating medicines, antibiotics, sedative medications, hormone injections, adapt to air contamination, i.e. mainly to the abuse of modern pharmacological therapy.

A complete, deep and urgent revision of modern medicine is becoming inevitable even today. The true greatness of a person who is a special responsibility, consists in the ability to correct mistakes and allow a new concept that is more in line with reality.

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Scientists about the concept A.S. Zalmanova
Zalmanov and capillaries (fragment of the article by Prof. M. Mancini)

Agile, full of humor, small in stature, with penetrating eyes, with an eternal cigarette in his mouth and extremely sensitive hands, this man lived a life similar to a novel. To pay for his studies, Alexander Zalmanov was a court chronicler, a controller on trains near Moscow, a senior foreman on construction sites and the author of amateur plays. He devoted himself to the study of medicine, but in the fourth year of his studies he interrupted them in order to thoroughly familiarize himself with legal sciences, literature and philosophy. "Technology alone is not enough," he said, "to create a doctor and study a person."

Then he returned to medicine and soon turned out to be one of the best Russian specialists. For his political convictions, which were little in agreement with the directives of the tsarist government, he was exiled, went to Germany and entered the University of Heidelberg. There he became an apprentice of the great neurologist Erb and visited other major specialists of that time.

In Italy (in Rome) he came to Forlanini, the creator of the pneumothorax. For several years he was the director of a sanatorium near Geneva. Then again he returned to Germany, to Heidelberg - to Krehl; in Cologne he worked for Moritz, in Vienna - for Winternitz, in Marburg - for Bradech, and in Paris - for the famous cardiologist Guichard.

He is a restless man, a wanderer, insatiably inquisitive. He feels that he lacks a common, so to speak, panoramic comprehension of the human body, a bodily unity, a synthetic man.
This unity, which he persistently seeks, disappears, crumbles into multiple specialization. Knowledge of one organ or system of organs does not make it possible to see the patient as a whole, in his entirety, and since without this it is impossible to make a correct diagnosis and successfully treat, Dr. Zalmanov continues to search.

The First World War broke out. He returned to Russia, was in charge of a military hospital, was wounded, and received a medal. After the revolution, he entrusted with the reorganization of the fight against tuberculosis, he was in charge of the People's Commissariat of Health resorts where they were treated with water. He was entrusted with the treatment of Lenin. And one evening in 1921, in a modest apartment in the Kremlin, Lenin, satisfied with the work of his doctor, asked him, as they ask in fairy tales, if he wanted anything? Any of his desires would be immediately satisfied. And Dr. Zalmanov changed his habits for the second time, renounced the easy life and fame and returned to Germany.

For many years the insatiable "inquisitive", eternally dissatisfied, visited the most famous clinics and the most famous institutes. He consistently worked in the clinics of Kraus, Bergman, Gis, Sondek, Goldscheider, Schleyer, Munch, in the pediatric clinics of Czerny, Eckert, Opitz, in the radiological clinic of Lazar, in the tuberculosis clinic of Klemperer and Ulrik, in the Institute of

Pathological Anatomy in Lübarsch and Ressi, in the skin clinic of Buschke and Stokel, in the neurological clinic of Bongfer, at the Oppenheimer Institute of Biochemistry.

He studied all areas of medicine in his work with the greatest scientists; his awareness, without exaggeration, is exceptional and goes beyond the ordinary. He wanted to introduce unity and logic into a field where division prevails. He wanted to decipher that the specialization of made it inaccessible for this decipherment: the human body in its solemn integrity and inseparable unity. The core of the theory Zalmanov lies in the study of theZMA based on the system blood capillaries. He asserted that there is not a single disease, accompanied by morphological changes, there is not a single functional disorder in which the condition of the capillaries is not would have turned out to be a paramount factor.

The thoughts of A. Zalmanov are set out in the book, which has already been published in Italian (A. Zalmanov. "The Mysteries and Wisdom of the Body". Milan).

The Wise on the Mysterious Wisdom of the Body
(Thoughts of Prof. F. Friedbert on the Book of A. Zalmanov)

What you can do to hear from real experts on China and the Far East that they are in the a long search and study, and even when it seemed to them that They are on the verge of discovering incomprehensible secrets, in fact they were convinced that they did not know anything.

The question is not much better with our ideas about life, with ideas about our own body. No matter how many individual discoveries made since the time of the great Hippocrates, i.e. during 2500 years, all of them remained partial, half-hearted discoveries, since in the In most cases, instead of considering phenomena related to In the unified cosmic universe, theoretical explanations were based on one-sided and contradictory views, which led to partial or complete errors.

And in the end, after careful and attentive study, you have to to claim that the history of medicine is nothing but history medical errors.

Taking into account what has been said, it becomes clear what the significance of the the mysterious wisdom of our body when it is healthy and when it is gets sick. In order to understand this mysterious wisdom, Medicine of our days needs to completely get rid of the mechanical thinking and try to move along new roads, as it does Alexander Zalmanov in his book "Secrets and Wisdom of the Body", in which he gave a very figurative subtitle "Medicine of the Depths".

The author discards the seemingly spectacular external phenomena and intrudes into the the depths of life, like a mysterious wizard who has learned the wisdom of the East. We are talking about a doctor who deeply disagrees with modern medicine and offers her an open fight. Doctor of Medicine, graduated from universities Russia, Germany and Italy, who practiced medicine in the Soviet Union, who worked for 8 years in various clinics in Europe at the the most famous doctors of his time, as a result of the long observations and reflections, he devoted himself to empirical medicine, since, In his own words, the science of a sick person should remain First of all, the problem of human observations. In contrast to statements about local diseases, diseases of individual organs, Zalmanov claims that the disease always affects the whole person, proceeds from the dynamics of a living, pulsating organism and indicates the the importance of blood circulation and capillary physiology.

The predominant importance of the physiology of blood circulation becomes clear if think about that, according to the data given in Zalmanov's book, the total length of capillaries in a healthy person is 100,000 km, the length of the renal capillaries 60 km, capillary endothelial surface 6000 m and The surface of the pulmonary alveoli is almost 8000 m2.

A dizzying game with numbers! Meanwhile, it is not a question of memorization individual figures in meters and kilometers as dead ballast in science, and about approach to the human body as a whole in the relationship of lengths and surfaces, on the broad road of the only correct physiological anatomy.

When the author draws parallels with the natural sciences, especially with modern nuclear physics, then even here he does not bow to the numbers and scales. In essence, it is a question of using different sciences to come to common truths subject to universal laws.

On this seeming workaround in principled discussions Author builds the integral dynamics of the human body, based on the blood

circulation in completely new sizes, as opposed to the usual clinical point of view. The importance of this view of wholeness of the human body demonstrated at a medical meeting in Ulme Dr. Sollmann from Munich in his report on the importance of kinetics of the spine for the eye, confirmed by X-rays.

We suddenly begin to understand the enormous importance of the aperture as the "second heart" for the venous blood and lymphatic bed. We now understand what a change in the volume of organs means, both physiologically and and pathologically; Take, for example, the lungs during inhalation and exhalation, and we Let's understand the deep meaning of "airing" our body. Of these, knowledge, of course, profound conclusions grow for practice. So, on the example of pulmonary tuberculosis alone (Dr. Zalmanov works 26 years on tuberculosis by his own method and has great authority on this, still so dangerous disease) the point of view becomes clear Zalmanova, proceeding from physiology, pathology, diagnostics and therapy. This point of view comes from deep interdependencies, from dynamics life. Based on this, he inevitably comes to the natural approach to the body, in which, along with hydro- and balneotherapy attaches great importance to the principles of self-regulation of the body, freeing himself by drainage from poisonous and harmful substances. At the same time, the author allocates a minimum place to medicines.

I want to say again briefly: we must give this book a special place in our medical literature. It was created by the author on the basis of deep knowledge and vast practical experience. It can give invaluable to every doctor, in whose heart it will find a response and who understands the need to raise the level of their biological knowledge. The book is written in an exciting, interesting way, and acquaintance with it leaves an indescribable impression.

Academician B.N. Klosovsky About the book A. Zalmanova "Secrets and Wisdom of the Body" (Depth Medicine)

Facts and the arguments that A. Zalmanov cites in his book are aimed at to convince doctors in various pathological conditions instead of an inexhaustible amount of chemical and pharmacological means to widely use physical methods of treatment.

A. Zalmanov based on more than 60 years of experience as a practicing doctor came to the conclusion that the main causes leading to the pathology of the or other organ, and subsequently the whole body, are disorders the functioning of the humoral systems of the body - lymphatic, circulatory and especially its capillary part. Therefore, the author of the book rebels against the introduction of medicinal substances, especially the introduction of injectable substances way. He calls for an in-depth study of humoral pathology, i.e. to the study of qualitative and quantitative accounting of disorders, occurring as part of the fluids of the human body.

A. Zalmanov considers disorders of capillary physiology as one of the the main points of human diseases. To what he noticed with his keen and thoughtful eye of a practicing physician and generalized into the theory of pathogenesis most diseases, experimental science came after conducting numerous experiments on animals and testing them in the clinic.

We cannot but agree with A. Zalmanov regarding the view that that metabolism takes place at the level of capillaries. This is also said by our joint research with E.N. Kosmarskaya, summarized in a monograph "Active and inhibitory state of the brain" (1962).

We have shown that the blood circulation of a particular organ is impossible to be considered as a nourishment of an organ or cell with arterial blood. Each An organ or cell must be provided by two systems, namely the system that brings arterial blood and the system that provides outflow of venous blood with the products of organ or cell metabolism. Both systems must work accurately and conjugately. If one of the systems goes out of the system, and the other cannot cope with the overload, the body pathological processes that ultimately lead to disease.

That is why A. Zalmanov focuses all his attention on maintaining the normal functioning of these two systems: on the restoration of correct capillary blood circulation, on the release of the body from reverse metamorphosis products accumulated in the venous bed blood vessels. For this purpose, the author recommends the following methods of treatment: as, for example, the use of leeches. However, he paid great attention to the focuses on hydrotherapy treatments, in detail developed by him and described in his book. These are mainly heat baths with various impurities (with white turpentine emulsion or yellow solution). A.3almanov notes that white turpentine emulsion It can increase blood pressure, yellow, on the contrary, can lower it.

In some cases, their use alternates both with each other and with adding hay and walnut leaves to baths.

A. Zalmanov also recommends local wraps or immersion in increasing temperature bath of certain parts of the body, for example, hands and legs, which it achieves not only the local expansion of the capillaries, but also improving blood circulation by reflex in remote areas organism. The above allows us to think about a broad perspective for a more in-depth study of the interdependence of blood supply to individual parts of the body.

It should be noted that A. Zalmanov does not make any appointments trivial according to the stencil, but after a thorough biochemical study composition of body fluids. In this regard, the author's views are interesting on the meaning of the diaphragm as a "second heart" for the body, which promotes the outflow of lymphatic fluid and venous blood into the venous bloodstream.

The book by A. Zalmanov urges the doctor to be critical of the use of various medicinal substances, which in some cases bring alleviation of one or another organ, while at the same time disrupting the function of another body. As a result of the huge number of various chemical and pharmaceutical substances are not submitted to the practitioner it is possible to observe their positive effect in some cases, or negative - in others. A good example in this regard is serve the sad fate of such a "wonderful" sedative, as a tranquilizer produced by West German industry.

This remedy met its purpose, and the persons who used it really felt calm, had a good restful sleep. However, the use of this drug in pregnant women led to almost 100% of cases to the birth of children with various deformities, especially with phocomelia. And only after using this sedative in for a number of years, after the appearance of more than one thousand deformed children Practicing doctors noticed its negative properties.

Many doctors began to notice that other newest Chemical and pharmaceutical agents ultimately lead the body to to cure, but to new diseases. In this regard, in the literature Several monographs have appeared dealing with the remedies causing diseases (for example, G. Alexander. "Complications in drug therapy". Moscow, 1958).

The book by A. Zalmanov leads the doctor to rational therapy and prevention, aimed at restoring the impaired functions of the body as a whole, or of its individual parts, to prevent diseases and aging of the body, to prolong his life. Therefore, a return to natural methods of treatment on a new, scientifically developed basis, to which the book appeals A. Zalmanov, we must support him in every possible way. A book that has been translated into almost all major languages, should be translated into Russian as well.

Annexes
I. Results of treatment according to the system of A.S. Zalmanov in St. Petersburg medical institutions.

Rod an idea that runs through all three books by A.S. Zalmanov and unites Their main provisions are the "wisdom of the organism", its ability to self-regulation as self-healing in case of various "breakdowns", i.e. functional disorders. He considers this ability at different levels organization: cellular, organ and systemic.

The study of the processes of self-regulation (autoregulation) of the body is one of the central problems of modern natural science. Recently, she acquired special importance in connection with the rapid development of cybernetics and bionics. At the same time, it is of great interest for biology and medicine, since the processes of autoregulation serve as the material basis integrity of the body, ensuring the constancy necessary for life of the internal environment (homeostasis) and the normal functioning of all organs and fabrics.

There is no doubt that knowledge of the possibilities of self-regulation of functions has of great importance for human physiology and practical medicine. It is from this point of view that Zalmanov's book "Secret Wisdom human body. Depth Medicine" is a special interest, since it aims to learn the basic mechanisms of self-regulation of functions.

With extensive clinical experience, Zalmanov constantly monitored the scientific medical works devoted to the study of the features of tissue and cellular metabolism, changes in intra- and extracellular body fluids. Comparing the conclusions obtained by the experimental histophysiology, with his own clinical observations of different categories of patients, he came to an original, physiologically substantiated point of view on the etiology, treatment and prevention of many chronic (long-term) diseases.

What was his main focus on? To this question the subtitle of the book answers: "Deep Medicine". Indeed, the book is mainly

devoted to the intimate life of human cells and tissues of the body, its wise structure, its struggle with the functional and organic disorders. Zalmanov came to the conclusion that stimulation natural defenses of the body is the best tactic for the treatment of many chronic diseases. He wrote: in a living organism there is a A huge reserve force that clinical therapy must release by removing all obstructions that interfere with respiratory functions, nutrition and excretion.

Underlying causes (root causes) of most chronic diseases saw in the previous illnesses long-term, imperceptible to a person disorders of one or more of the main life-supporting systems of the body - cardiovascular (mainly at the level of capillaries), respiratory, excretory (gastrointestinal tract, kidneys, liver, skin). The consequence of these disorders is the weakening of natural defensive reactions - the "wisdom" of the body, which leads to the emergence of various degenerative-dystrophic processes, sometimes lasting in for many years.

From this he concluded that if the number of employees is increased, capillaries, setting in motion large quantities of blood stagnant in the "lakes" of the liver and spleen, to increase the volume of oxygen delivered by the lungs through the blood to all organs and tissues, to organize a continuous removal of accumulated harmful substances through the kidneys, skin, lungs, gastrointestinal tract, as a result of the rate of biochemical reactions and assim processeswill accelerate, the energy balance of the body will increase. All this activates non-specific protective reactions and A sick body will cope with its disease without help potent chemotherapy drugs.

Since all intimate life processes are the transition of oxygen and nutrients from the blood into the cells and excretion from the cells back into the blood of metabolic products - occurs in the capillaries, through their endothelium, The main attention in stimulating the processes of self-healing should be is aimed at normalizing the activity of capillaries.

Recognizing the unifying and regulating role of the central nervous system, even suggesting a hypothetical "supercenter" in the head human brain, Zalmanov considered the primary cause of the overwhelming majority of functional disorders of the body disorders occurring at the level of capillary system. In his opinion, confirmed later works of a number of researchers, in almost every disease it is possible to to find pathological changes in capillaries (capillaropathy). Based on Zalmanov developed an original method of treating subacute and chronic diseases, which he called capillary therapy.

The author's view on the role of the diaphragm as the second heart, as well as on the liver and the condition of the skin as a mirror health. Here the reader will find many interesting thoughts and conclusions. In the analysis of various pathological conditions, Zalmanov attached importance to the the importance of the quantitative and qualitative composition of urine. He believed that A detailed urinalysis allows you to have a complete picture of the the state of intra- and extracellular fluids of the body, and consequently, to assess the patient's condition more accurately. Great attention at the same time is given to the determination of the amount of calcium, potassium, chloride in the urine sodium, urea and uric acid. According to Zalmanov, a urine test - This is a "stethoscope of the kidneys" or "hydroscope of the quality of blood and all body fluids".

It follows from the above that the therapeutic The effects are not aimed at the diseased organ, but at the general life-supporting functions: metabolic processes at the level of capillaries, respiratory system and excretory organs. To normalize functions capillary system, he developed special compositions for therapeutic baths: white turpentine emulsion and yellow turpentine solution.

He successfully used these solutions to treat many diseases: rheumatic and metabolic polyarthritis, hypertension, hypotension, obliterating endarteritis, impotence, etc. activity of the respiratory organs (including skin), Zalmanov used hot chest wrap, hot hand baths and general hyperthermic baths. To stimulate the activity of the excretory organs, including the skin, he used baths with an infusion of leaves walnuts, soda baths with alum, diuretics and laxatives herbal preparations, medical glycerin, fruit and vegetable diet (see Appendix II) by the Swiss physician Bircher-Benner.

Of course, every single provision of Zalmanov's book and almost Each of the procedures he used (except for turpentine baths) is not new in physiology and medicine. But taken together in a certain system, they, undoubtedly, represent a new direction in the prevention and treatment of many chronic diseases. As already noted, heAbout System treatment is characterized by simplicity, physiology and the desire not only to to restore the functions of the diseased organ, but mainly to activate natural protective reactions that contribute to self-healing.

Zalmanov's views on the role of natural non-specific protective forces of the body and mechanisms of self-regulation of functions to maintain health, on the one hand, and to "start" the processes of self-recovery - on the other, were supported and

substantiated in numerous works by Soviet and foreign scientists in recent decades.

Thus, according to many clinical and experimental studies, the body of a person really has very effective natural defense mechanisms. For example, during epidemics of some highly contagious infections, even such as cholera, typhoid fever, dysentery, the number of healthy people who have not been sick before, but have in the body of the causative agents of these diseases, can be many times greater than the number of sick people. For every 10 patients with diphtheria and 1 patient with poliomyelitis, there are at least 100 healthy bacillus carriers.

It was also found that only isolated cases of injuries (approximately 1%) are complicated by gangrene or tetanus, despite the fact that the Microorganisms often get into the wound.
Thus, it is recognized that morbidity is determined not only and not only the presence of pathogenic factors and their direct influence, how much by the state of the body at the time of exposure to these factors, i.e. the level of general non-specific resistance of the body. With age This level gradually decreases and, as a result, increases morbidity and mortality.

This therapeutic direction, in contrast to the generally accepted one focuses the doctor's attention on the general condition of the patient, on the level of its main life-supporting functions - blood circulation and metabolism substances in cells and tissues, the volume of oxygen supply and purification from harmful metabolic products. With this approach, I thought Zalmanov, disease labels are losing their meaning.

All these provisions formed the basis of the treatment carried out in St. Petersburg, Moscow, Kiev, Kirov, Nizhny Novgorod by general practitioners and specialists in functional diagnostics. For example, I will give results of non-specific treatment obtained in St. Petersburg on three groups of chronic patients: with respiratory diseases (chronic pneumonia, bronchitis, asthmatic bronchitis, tracheitis and etc.), cardiovascular system (hypertension, obliterating endarteritis, phlebitis, lymphostasis, etc.) and musculoskeletal system (polyarthritis of various etiologies, spondyloarthrosis, arthrosis, and etc.). The duration of the disease in most cases exceeded 10 years. All patients before the start of nonspecific treatment used various types of drug therapy, as well as spa and physiotherapy treatment, but without a satisfactory positive result.

Before starting treatment, the patients underwent clinical, biochemical and physiological examination. In addition to the usual clinical status, patients studied the basal metabolism and the functions of external respiration (tidal volumes, ventilation indicators, oxygen saturation arterial blood, etc.), the state of peripheral circulation (oscillography of the extremities, capillaroscopy of the naillodge), was carried out blood and urine tests (clinical and biochemical). After the course or several courses of treatment, all these studies were repeated and their The results were compared.

Thus, it was possible to observe not only clinical changes, but also over the dynamics of physiological and biochemical indicators after non-specific treatment.

Respiratory diseases

It is known that In chronic diseases of the respiratory system, it is mainly disturbed gas exchange in the pulmonary capillaries, which causes a decrease in oxygen in the blood (hypoxemia) and a decrease in the level of oxidative processes in the cells and tissues of the body. At the same time, hypoxemia to a greater extent disrupts the functions of pulmonary capillaries than peripheral capillaries, since capillaries lungs, unlike the capillaries of other systems, are constantly filled venous blood, and therefore, when the ventilation of the alveoli decreases, increased transition of fluid (its transudation) from the pulmonary capillaries to the unventilated alveoli.

This creates a kind of "vicious circle" when a decrease in respiratory of the surface of the pulmonary alveoli causes hypoxemia, which contributes to formation of exudates and, thereby, further reduces the number of functioning lung units.

Clinical Observations of Patients with Chronic Nonspecific pneumonia revealed not only changes in gas exchange, but also disorders metabolism and other pathological phenomena common to everything body, which is understandable with a reduced flow of oxygen to all organs and tissues. So, according to the clinics of the Military Medical Academy in St. Petersburg, simultaneously with a decrease in the percentage of oxygen saturation arterial blood protein metabolism is disturbed, the amount of body of vitamin C and other changes are noted.

In cases of respiratory tract disease, the main methods of non-specific Zalmanov's therapies are aimed at increasing the number

of functioning pulmonary capillaries in order to reduce exudative processes and improving the nutrition of lung tissue, i.e. breaking the "vicious circle".

This is achieved with the help of hot chest wraps that liquefy sputum accumulated in the alveoli and increasing its excretion from expectoration. Cleansing of the lungs is accompanied by a decrease in shortness of breath, at the same time nasal breathing is restored, which is patients with chronic lung diseases are very often difficult. Additionally, hot hand baths and decoctions of medicinal products are used herbs that have an expectorant and antispasmodic effect (see Appendix III). A hot chest wrap and hand baths warm the patient's blood, which increases its bactericidal properties, i.e. the ability to kill pathogenic microorganisms (by Soviet scientists, for example, P.N. Veselkin showed that an increase in blood temperature by 1 °C in 10 increases its bactericidal capacity).

In case of joining the pulmonary disease symptoms circulatory insufficiency, hot chest wraps were combined with camphor infections or ingestion of camphor bromide. Warming the Blood and by dilating the pulmonary and cardiac capillaries, this procedure enhances The effects of camphor on the lungs and heart and increase the absorption of oxygen tissues.

Hot chest wrap technique. Preparation for the procedure: two long terry towels (soft, washed many times) are enough put one on top of the other, then fold in half along the length, i.e. so that the width is halved and the length remains unchanged, then roll them up. The other two are wider and stiffer terry Fold the towels in the same way. The length of all towels should be sufficient (at least 1.5 m) to begin wrapping the chest the patient's cage from the right armpit to the chest and back and back again to the chest to the left undermice.

As a result, 2 times more layers are formed on the chest than on the back. Fold a woolen or fleece blanket 4 times lengthwise and roll it up roll. Instead of a blanket, it is convenient to use a special quilted jacket, proposed by I.P. Velikanova. It is made of cotton wool sheathed cotton (not synthetic) fabric. A quilted jacket is a a strip of quilted cotton wool 33-35 cm wide, 160-180 cm long, to which sewn from the back two oblique strips of the same cotton, sheathed with material, 110 cm long and 20 cm wide. and then lie on the shoulders of the patient and overlap on the chest. Then Prepare two waffle towels (1.5 m long each) by placing them on top of each other in an unfolded form.

These towels should be wrapped around the chest in such a way that There were two layers of towels on the back, and 4 on the chest. Pour water into a basin temperature of 68 °C (the temperature is set by mercury a 100-degree thermometer with a division price of 1 °C). Doctor (or nurse) puts on light knitted gloves and rubber gloves over them, lowers them into the basin two soft terry towels, rolled up, gives them soak in water and squeeze them out quickly and strongly, then quickly wraps the patient's chest over dry waffle towels.

After that, the second roll of stiffer and wider dry terry towels are placed on wet towels, tightly covering the chest cage. Then the chest is wrapped in a 4-layer blanket or wrapped in the above-mentioned quilted jacket. For a secure fixation, the lower Part of all layers is tied with a light belt. The patient goes to bed on the back, holding the ends of the quilted jacket (blanket) on the chest, it is closed until chin with a cotton blanket, tucking it under the shoulders on all sides, body and legs to make a semblance of a swaddled "mummy".

You need to lie in bed for exactly 20 minutes (according to the clock). During the procedure you should open a window (in winter) or a window (in summer), not forgetting cover the patient's head with a towel or scarf. Before you take it off wrap, it is necessary to close the window (window) and put it on the patient a fleece or knitted shirt with sleeves. This is done as follows In this way. If a quilted jacket is worn, then the straps of the quilted jacket are thrown onto the pillow, not turning away the cotton blanket. Then put on the shirt in such a way that His hands were in his sleeves, and the rest of his shirt remained around his neck.

After that, the cotton blanket is thrown back to the waist and in a lying position The chest is freed from all towels, a quilted jacket and a blanket. The shirt is lowered to the chest and only then the patient is seated in bed, while removing all layers of wrap from the back and covering it shirt. As soon as this is done, the patient goes back to bed and is covered with a cotton blanket (the position in bed is arbitrary). After At the end of the procedure, you need to rest in bed for at least an hour. Best for do it before going to bed at night.

After the first 2-3 procedures, the body temperature may rise and increase or cough more frequently. These symptoms disappear or significantly disappear decrease 2-3 days after the start of treatments, they are not deterioration of health and cannot be the basis for stopping the hot chest wrap procedure.

There were 284 patients in the group of patients with this pathology, of which 32 children aged 2 to 16 years, 56 people from 17 to 40 years old and 196 people from 41 to 78 years old. Duration of the disease - from 1 year to 12 years old. During the clinical and physiological examination before the start of treatment with of the majority of patients (262 people, or 92%) were significantly altered functions of external respiration, reduced tidal volumes and oxygen in the blood (Table 1). On an X-ray of the lungs in many patients focal infiltrative changes, expansion and intensification of shadows of the lung roots, in some patients PNSVMOFIBROSIS was diagnosed.

After 1-2 or more courses of the use of hydro procedures proposed by Zalmanov, in the overwhelming majority of patients improved or subjective sensations and objective indicators have been restored to normal: cough stopped, weakness, shortness of breath, cyanosis disappeared, approached normal function of external respiration, hypoxemia disappeared or decreased (Table 1).

To illustrate what has been said, I will give a few examples.
1. V-noy B., 6 years old. Diagnosis: chronic nonspecific pneumonia II st., chronic pharyngitis, rhinitis. He fell ill at the age of 5 months. In history of several bilateral pneumonias, every spring and In autumn, exacerbation of bronchopneumonia, pharyngitis, rhinitis. Specific treatment (sulfonamides, antibiotics), gamma globulin, and symptomatic remedies caused short-term improvement, after which which was exacerbating again.

On examination: reduced nutrition, skin and mucous membranes pale, cyanosis of the lips and nasolabial triangle, insufficient physical development. With little physical effort (calm walking, changing the position of the body) and even when talking quickly shortness of breath develops. In the lungs on the right there are multiple dry crackles, on the left - harsh breathing, isolated dry wheezing. In the blood, hemoglobin is lower of the age norm, increased erythrocyte sedimentation rate (ESR), the rest of the indicators are within the normal range. Urine analysis without pathology. With X-ray examination shows enlargement of both lung roots, on the right in the lower part of the lung, perivascular infiltrative changes (i.e., signs of an inflammatory response).

Treatment with hot chest wraps is started during the period of exacerbation and lasted for 3 months until the disappearance of all pathological symptoms - cough, shortness of breath, cyanosis, weakness. During the examination after of treatment, wheezing in the lungs disappeared, on the right - harsh breathing, on the left - vesicular. On the X-ray, the complete disappearance of infiltration, a slightly enhanced pattern of both roots of the lungs. Blood test in within normal limits. After recovery, the child was under observation in for 8 years, during this time there were no relapses of pneumonia.

2. B-noy S., 12 years old. Diagnosis: chronic pneumonia of the II stage, asthmatic bronchitis, tonsillitis, adenoids, right-sided maxillary sinusitis. Complaints of shortness of breath, cough, attacks of suffocation, fatigue. He first fell ill with pneumonia at the age of one and a half months. From 6 years old frequent exacerbations of pneumonia and bronchitis began, chronic rhinitis. Drug treatment, physiotherapy (UHF on the chest, sinuses, etc.), calcium electrophoresis on the chest, massage chest, narzan baths, mud applications for maxillary sinuses cavities. 24 treatment sessions in a hyperbaric chamber, removal of nasal polyps and Table

1
Tidal volumes and aciditynative blood saturation (in % of the proper value) in 252 adult patients with chronic organ diseases breathing after treatment according to the Zalmanov method

Дыхательные объемы и оксигенация крови	Величина		
	средняя	минимальная	максимальная
Жизненная емкость легких			
до лечения	52.5	40.0	67.0
после лечения	83.0	60.0	100.0
Дыхательный объем воздуха			
до лечения	62.5	50.0	70.0
после лечения	80.0	70.0	92.0
Минутный объем дыхания			
до лечения	88.0	50.0	80.0
после лечения	85.0	70.0	110.0
Форсированная жизненная емкость легких			
до лечения	42.0	35.0	76.0
после лечения	75.5	55.0	91.0
Максимальная вентиляция легких			
до лечения	64.0	25.0	78.0
после лечения	71.0	58.0	100.0
Резерв дыхания			
до лечения	38.0	24.0	72.0
после лечения	75.0	48.0	99.0
Насыщенность кислородом артериальной крови			
до лечения	90.0	86.0	94.0
после лечения	95.5	94.0	98.0

Made it easier the patient's condition. Nasal breathing was not restored after the operation, In this regard, the diagnosis was made: vasomotor rhinitis. Continued severe asthmatic attacks, pulmonary emphysema was diagnosed.

On examination: nutrition is slightly reduced, skin and mucous membranes the membranes are pale, cyanosis of the lips, nasal breathing is absent. Pulse rhythmic, the boundaries of the heart are within the age norm. In the lungs on the right scattered dry and wet crackles. ESR accelerated (28 mm/h), number leukocytes are increased. Hypoxemia (90% of oxygen in arterial blood). Urine analysis is within normal limits. On X-rays of the thoracic organs cells, there are phenomena of peribronchial and perivascular infiltration in the posterior-inferior parts of the right lobe of the lungs, expansion of the shadow lung roots with an increase in the hilar vascular pattern.

The patient was prescribed hot chest wraps, hot hand wraps baths. After 30 chest wraps and 12 hand baths, the cough decreased, It became possible to constantly breathe through the nose, attacks of suffocation occurred were less frequent and weaker and shorter, the general condition improved significantly. Treatment continued for another 4 months, after which attacks of suffocation completely stopped. The boy was observed for 6 years, currently He is practically healthy.

The examination after treatment showed that the wheezing in the lungs disappeared, blood and urine tests within normal limits; fluoroscopy of lung tissue Pathological changes were not revealed.

3. B-noy M., 31 years old. Diagnosis: chronic nonspecific pneumonia II Duration of the disease 8 years old. Antibiotics were used throughout the entire period of the disease, but The patient's condition progressively worsened. Regarding the These years of pneumosclerosis, surgical intervention was proposed (resection of the lower lobe of the right lung). The patient refused the operation.

Complaints during examination of severe weakness (the patient cannot get up from the bed), sharp shortness of breath, constant debilitating cough with a slight amount of sputum, pain in the right side of the chest. With examination: the condition is of moderate severity, nutrition is sharply reduced, the skin and mucous membranes are pale, cyanosis of the lips. Pulse of weak filling, 110 beats per minute, blood pressure 110/70 mm Hg, heart borders unchanged, breathing is shallow, rapid (40 breathing

movements per minute). Body temperature is slightly elevated (37.3 °C). With listening to the lungs on the left and especially on the right, there are many scattered, dry and wet wheezing. The number of red blood cells in the blood is reduced, the content of leukocytes, ESR is 24 mm/h. With X-ray examination revealed the phenomena of pneumosclerosis with in separate areas of infiltration in the lower lobe on the right, expansion lung root and strengthening of the basal pattern on the left.

A study of the functions of external respiration showed a significant decrease in lung volumes, pronounced hyperventilation of the lungs. With The following picture was observed on capillaroscopy: the background is pale with cyanotic hue, a small number of capillaries in the field of view (6-8), blood flow slowed, with frequent stops, subpapillary layer poorly developed.

The patient was prescribed hot chest wraps daily, on the first for a month 2 times a day, then for 4 months once a day, medicinesherbs (antispasmodic, expectorant and sedative). After 2 weeks from the beginning of treatment, the patient's condition began to improve, A month later, he got out of bed, and after 3 months, weakness and shortness of breath disappeared and cough, the skin on the face and mucous membranes became pink. The pulse after treatment is 78 beats per minute, wheezing in the lungs is not bugged. On the X-rays of the lungs on the right - enhanced basal pattern, on the left - lung tissue without pathological changes. The functions of external respiration approached normal. Capillaroscopic picture: pink background, 10-12 capillaries in the field vision, blood flow is fast, uniform, non-stop, subpapillary the layer is normally developed. Blood and urine tests without pathology.

After 6 months of treatment, the patient was found to be practically healthy.

4. B-noy S., 77 years old. Diagnosis: chronic bronchitis, pulmonary emphysema, tracheitis, laryngitis, rhinitis, general atherosclerosis, cardiosclerosis, Pulmonary heart failure of the II stage Duration of the disease chronic bronchitis for about 6 years. Previous medication and Sanatorium-resort treatment did not give a positive result.

On examination, complaints of shortness of breath, debilitating dry cough, especially at night and in the morning. The general condition is satisfactory, nutrition is low, cyanosis lips and mucous membranes. The pulse is rhythmic, 90 beats per minute, tones hearts are deaf, blood pressure is 160/100 mm Hg. Number of breaths 25 per minute. With auscultation, breathing is weakened, in the posterior-lower parts both lungs have scattered dry and wet crackles. Blood and urine tests in within the age norm. An X-ray of the lungs reveals strengthening of the pulmonary pattern with the presence of fine-meshed lumens, in lower lobe on the right, pronounced fibrotic changes. When examining functions of external respiration, reduced ventilation of the lungs was noted in a significant decrease in tidal volumes.

Capillaroscopy before treatment: cyanotic background, 5-7 capillaries in the field vision, the shape of capillaries in the form of dots, commas, slow blood flow, with frequent stops, the papillary layer is pale.

After 3 months of treatment with hyperthermic baths (2 times a week), hot chest wraps (on days without baths) and medicinal herbs noted a noticeable improvement in the patient's condition: cough significantly decreased (there is a slight cough in the morning), cyanosis disappeared, shortness of breath at rest stopped, appeared only with rapid walking or quite significant physical effort.

During the examination after the first course of treatment, the lungs were listened to Only single dry crackles. The X-ray picture changed slightly towards normalization. Functions of external respiration improved, hypoxemia decreased (instead of 89% oxygen, 95 %). The capillaroscopic picture normalized accordingly age (background pink, 10-12 capillaries in the field of vision, blood flow accelerated, there were no stops).

After the first course of treatment, the patient regularly repeated the procedures 2 times per year (in spring and autumn) for 2 years. Each recurrence course was carried out for 2 months. During the entire period of treatment of complaints of cough and shortness of breath did not show.

Thus, the application of the procedures proposed by Zalmanov for treatment of chronic diseases of the respiratory system made it possible to achieve Satobjective improvement in almost 84% of cases (Table 2).

Cardiovascular diseases Systems

Non-specific.e Treatment methods were used in patients with hypertension, obliterating atherosclerosis of the vessels of the extremities, with varicose veins dilated veins, phlebitis and thrombophlebitis. Under our supervision there were 121 patients with arterial hypertension, including symptomatic hypertension in 26 patients aged 30 to 45 years, and 95 people with hypertension PA and B st. (11 people from 20 to 30 years old, 16 people from 31 to 40 years old, 17 people from 41 to 50 years old years, 23 people from 51

Таблица 2

Результаты лечения больных
с заболеваниями дыхательной системы

Основной диагноз	Число больных			
	общее	со значительным улучшением или практически здоровых	с незначительным улучшением	без изменений
Хроническая пневмония II ст.	106	85	21	—
Хронические бронхиты	112	103	9	—
Астматические бронхиты	43	27	10	6
Хронические трахеиты, риниты	23	23	—	—
Итого	284 (100 %)	238 (83.8 %)	40 (14.1 %)	6 (2.1 %)

years to 60 years, 18 people from 61 to 70 years old and 10 people over 70 years old). Duration diseases - from 4 to 16 years.

All patients have been using medication for several years. therapy with a short-term effect. Since some medications cause undesirable side effects (dry mouth, atonic or spastic constipation, intestinal spasms, mental depression, accumulation of water, sodium, uric acid, residual nitrogen in the body etc.), the condition of patients improved insignificantly and for a short time. K disadvantages of drug treatment include more or less rapid addiction, which forces you to increase their dosage or give up them.

Before the start of treatment, most patients were found to have changes in the pulmonary volumes, ventilation indicators, hypoxemia. During capillaroscopy, As a rule, there was a pale or cyanotic background, pronounced narrowing of the arterial and dilation of the venous knee of the capillaries, slow uneven blood flow, its frequent stops. In 76% patients have a significant increase in the level of cholesterol in the blood, In 68% of cases, an increase in blood sugar was found. Changes water-salt metabolism were observed in 82% of cases, they were expressed in retention of water and sodium ions in the body of patients with normal or slightly increased potassium excretion. Basically, the ratio was violated discharge of sodium and potassium in the urine. Normally, this ratio is 3:1, patients with hypertension it was 1.5:1 or even 1:1. In patients with excess weight, basal metabolism, as a rule, is reduced by 10-30% relation to the proper value.

Thus, the patients were found to have disorders of carbohydrate, fat and water-salt metabolism, as well as a decrease in the level of oxidative processes due to a lack of oxygen in the arterial blood (hypoxemia).

In the treatment of hypertension, the complex of therapeutic influences included Bircher-Benner fruit and vegetable diet, extended with dairy products, with a restriction of table salt, yellow turpentine baths and medicinal herbs. The Bircher-Benner diet, as shown by our observation, increases the amount of potassium in the patient's body, reduces the sugar and cholesterol levels, activates the metabolism of carbohydrates and fats. Yellow turpentine baths help to reduce peripheral vascular resistance, as a result of which the arterial Diastolic blood pressure is especially noticeable. This makes it easier to work heart and activates metabolic and oxidative processes. In addition, yellow baths cause increased excretion of water and sodium ions, thereby normalizing water-salt metabolism.

In case of insomnia or neurotic condition, in addition to diet and baths were prescribed collections of various medicinal herbs that contribute to the lowering blood pressure and having a sedative action. In the presence of habitual constipation, plants that stimulate the activity of the gastrointestinal tract. Concomitant angina pectoris or frequent headaches were an indicator of to prescribe a course of hot chest wraps on days when patients did not take baths. Patients without signs of obesity were prescribed only yellow turpentine baths (Table 3) and medicinal herbs.

After a course of treatment (usually within 3 months), arterial Blood pressure in our patients steadily decreased, especially

Таблица 3

Схема приема желтых скипидарных ванн

№ ванны	Количество раствора, мл	Температурный режим, °С	Продолжительность ванны, мин
1	20	36, через 5 мин 39	15
2	30	Тот же	15
3	40	"	16
4	50	"	16
5	60	36, через 5 мин 39, начиная с 12-й минуты 40	16
6	70	Тот же	16
7	80	"	17
8	90	36, через 5 мин 39, последние 4 мин 41	17
9	100	Тот же	18
10	110	"	18
11	120		18

diastolic, and the subjective state improved. At the same time, the indicators of basal metabolism (it increased), capillaroscopy and function external respiration. The amount of cholesterol and sugar in the blood decreased, increased urine output (diuresis), the index in the urine is sodium / potassium was close to the norm (2.2:1). This condition in patients persisted in for 2 years or more.

I will cite Several examples showing the results of treatment of hypertensive diseases according to the method of A.S. Zalmanov.

1. B-naya K., 73 years old. Diagnosis: hypertension of the II B stage, angina pectoris, cardiosclerosis, cerebral vascular sclerosis, hypothyroidism, obesity of the 3rd degree (height 168 cm, body weight 98 kg). Duration diseases 16 years old. Complaints of headaches, tinnitus, dizziness, periodic pain in the heart area, insomnia, fatigue, constipation Previous treatment: vasodilators, diuretics, painkillers, thyroidine, restricted diet sugar and flour foods, However, blood pressure remained elevated, Body weight has not decreased, headaches and dizziness have become more frequent.

During the examination: the general condition is satisfactory, the nutrition is increased, The pulse is rhythmic, 80 beats per minute. The boundaries of the heart are enlarged, the sounds muffled, the accent of the second tone is on the aorta. Blood pressure 180-200/100-110 mm Hg. The liver is enlarged, the legs and face are swollen. In blood cholesterol is increased. Daily urination decreased: 600 ml of urine with 1050 ml of fluid taken per day, Sodium excretion is reduced to 2.7 g per day (instead of 6.5-6.8 g).

Physiological examination revealed a decrease in basal metabolism (-30 %), decreased pulmonary and ventilatory volumes, hypoxemia (93%) oxygen). During capillaroscopy, spasms of capillaries, slowing down of the blood flow.

The patient was prescribed a fruit and vegetable diet for a period of 30 days, after 2 weeks from the beginning of the diet - yellow turpentine baths (30), after meals a heating pad on the liver area for an hour, collection of medicinal herbs that normalize activity of the intestines, kidneys and contributing to a decrease in arterial blood pressure.

After the 20th bath, blood pressure decreased, after the 30th bath was stable at 140/85 mm Hg. Headaches and pain in the area hearts disappeared, sleep improved, performance was significantly increased. During the month of the diet and the next 3 months of treatment, the patient lost weight 17 kg at the end of treatment and for 2 years after its completion The patient considered herself almost healthy, did not complain.

During the examination after treatment, a significant decrease in cholesterol in the blood. The specific gravity of urine has increased, diuresis is several increased (from 600 ml per day to 850 ml with the same amount of liquid). The amount of sodium excreted in the urine increased to 4.4 g in day. Physiological examination after treatment found a noticeable increase in basal metabolism (up to +10%), improved indicators respiratory function, the capillaroscopic picture normalized.

2. B-naya P., 49 years old. Diagnosis: hypertension of the II B stage, spondyloarthrosis, secondary radiculitis. Duration of hypertension 12 years old. Complaints of frequent and very severe headaches, insomnia, constant pain in the spine, aggravated by walking and in the second half a day, rapid fatigue, irritability. Previous Treatment: depression, dibazole, validol, cordiamine, papaverine, hypothiazide, theobromine, medinal.

On examination: the condition is satisfactory, the skin on the face is crimson shade, slight cyanosis of the lips. The pulse is rhythmic, 70 beats per minute, Blood pressure 180-200/110-120 mm Hg. Boundaries of the heart enlarged to the left, heart sounds are muffled, the accent of the second tone is on the aorta. ECG: sinus rhythm, gipertrophy of the left ventricle of the heart, intraatrial blockade. In the lungs on the right and left there are single dry crackles. Soreness when pressing on the spinous processes of the lumbar vertebrae of the spine. Chest and lumbar X-ray of the spine in two projections, osteochondrosis of the intervertebral vertebral discs is determined discs in the lower thoracic and lumbar regions and with a decrease in height intervertebral discs in the anterior parts. Phenomena of deforming spondylosis in the lower thoracic region. The abdomen is soft, painless, the liver comes out from under the costal edge by 1 cm. Amount of cholesterol in the blood not increased, sugar - 10 mmol. Specific gravity of urine 1010, weak traces protein, sugar 0.5%. Sharp changes were found in the determination of salt metabolism: during the day, the patient excreted 1.4 g of sodium and 2.6 g in the urine potassium with sufficiently abundant urination (taken per day 1100 ml, 850 ml are allocated).

As a result of the clinical and physiological examination, the patient was ascertaining: decrease in lung volumes, hyperventilation, hypoxemia. Capillaroscopy showed a change in the shape of the capillaries, reduced number of them in the field of vision, slow blood movement, frequent stops, cyanoticity of the subpapillary layer.

The patient was prescribed two courses of chest wraps and yellow turpentine baths (a course of 20 baths and 40 chest wraps). After of the first course, blood pressure dropped to 150/90 mm Hg, pain decreased in the back, sleep was restored, headaches, rapid Fatigue disappeared. After the second course, blood pressure is 140/150/80 mm Hg, the pain in the spine disappeared, the patient considered herself almost healthy. After treatment, she was under observation for a year and a half, for deterioration of her condition was not noted.

After treatment, the X-ray picture did not change significantly. Sugar decreased to 6 mmol. Urine analysis normalized (specific gravity 1021, sugar and protein were not found in the urine). Especially drastic changes occurred in water-salt metabolism: daily urination increased from 850 to 1000 ml with the same amount of liquids; Urinary sodium excretion increased from 1.4 to 8.5 g per day, and Potassium excretion decreased from 2.6 to 1.5 g per day.

Physiological examination after two courses of treatment showed that The patient's external respiration functions and the amount of oxygen normalized in arterial blood increased from 92 to 97%. With capillaroscopy the appearance of a pink background color, an increase in the number of capillaries in the field of vision, acceleration of blood flow.

Out of 126 patients with hypertension, 110 people (87% of their total number) there was a significant improvement in the general condition or its normalization: disappearance of headache, dizziness, relaxation tinnitus, shortness of breath, weakness, fatigue and others painful signs with a simultaneous decrease to normal values blood pressure. In 16 people, it was not possible to significantly reduce blood pressure and improve subjective state (13 %).

One of the most common diseases of the vascular system is obliterating endarteritis and atherosclerosis of the vessels of the extremities. This disease sometimes difficult to treat with medication and the matter may end amputation of toes or feet, and sometimes even amputation below or above the knee.

According to Zalmanov's views, arteritis of the lower extremities is a disease not only of the extremities, but also a disease of the cerebral arteries, coronary arteries, and intestinal arteries. Therefore, local arterial disease should be considered as an expression of general arteritis. And, therefore, local treatment aimed only at the isolated arterial part will remain unsatisfactory. It is advisable to begin the treatment of arteritis with the restoration of peripheral capillary circulation throughout the body, and not only in the affected extremities. In this case, properly conducted non-specific therapy can bring recovery or significant relief even if the disease lasts several years.

The main therapeutic procedure for obliterating white turpentine baths are endarteritis, as they most intensively stimulate capillary blood circulation.

Composition and method of preparation of white turpentine emulsion. Pour 550 ml of water into an enamel saucepan, put on fire. When the water boils, add 3 g of salicylic acid and 30 g of finely chopped baby soap into the water. Boil for about 15 minutes over low heat until the soap is completely dissolved, stirring frequently with a glass stick. When the soap is completely dissolved, extinguish the fire. Pour 500 ml of gum turpentine into a liter bottle with a wide neck or a liter jar (GOST 1571) and then pour the contents of the saucepan into the same place. Stir everything well, pour in 20 ml of camphor alcohol, stir again and close firmly with a cork. The finished white emulsion looks like yogurt, the consistency of raw chicken protein. During storage, it sometimes stratifies into two or three layers, in these cases, before use, it must be thoroughly stirred (shaking). Store at room temperature for up to a year.

Use of white turpentine baths. Pour water into the bath at a temperature of 36 ° C. Pour the required dose of white emulsion, stir thoroughly. Lubricate the perineum with petroleum jelly and lie down in the bath, raise for 5 minutes water temperature in the bath up to 38 °C (Table 4) and lie at this temperature for another 10 minutes at this temperature. Then get out of the bath, dry the body with a towel (do not rub!), put on underwear and go to bed. The dosage of the emulsion is given in Table. 4. During the bath or after it, a skin reaction will appear in the form

of a feeling of slight burning, tingling, tingling. Normally, this reaction is observed within 15-45 minutes after the bath. If the reaction is very strong (unpleasant), the dose of the emulsion decreases or does not increase until the skin gets used to it and the reaction weakens.

White turpentine baths increase the pulsation of capillaries, accelerate the flow of blood pressure, which contributes to an increase in blood pressure, intensification of peripheral blood circulation and improvement of trophism of all tissues of the body, especially where it is disturbed. These baths are usually used for hypotension, arteritis, deforming polyarthritis, muscle atrophy, flaccid paralysis, impotence, to accelerate the healing of fractures.

Since white turpentine baths increase blood pressure, they should be carried out under constant control, periodically replacing the white turpentine solution with yellow (Table 5).
To accelerate the positive effect of turpentine baths, hot chest wraps are used.

For the first 10 days, these procedures areare reduced every other day (one day turpentine bath, the second day a hot chest wrap), then in the Avoiding irritation of the renal parenchyma, baths are done after 2 days on 3rd or 2 times a week on fixed days. On days free from baths, patients make hot chest wraps (before going to bed) and cool leg wrap (for the whole night). The last procedure causes reflex dilation of the vessels of the lower extremities and, consequently, improves blood circulation in them, and also promotes the development of collaterals (additional blood vessels).

For a cool wrap around the legs, you need to take two pairs cotton stockings or socks and one pair of woolen stockings (socks). One pair of cotton stockings should be soaked in cold water, well wring it out and put it on your legs, wrapping the stocking from the knee to the lower leg (socks) You don't need to wrap it). On top of the wet stockings, put on a second pair of dry stockings cotton stockings and then woollen stockings, also wrapped from the knees on the lower leg and calf muscles.

When the pain decreases, a cool wrap of the legs is replaced by a more intensely acting hot leg wrap. Application technique This procedure is basically the same as a hot chest wrap. First, one leg, excluding the foot, is wrapped with a dry waffle with a towel and a wet towel (water temperature 70 ° C), then dry a terry towel and a woolen scarf on top of everything. Then into the pelvis Hot water is poured in (again brought to 70) and the same the second limb is wrapped, after which the patient is placed in a bed for 30 minutes, covering with a blanket. At the end of the procedure The patient should rest in bed for an hour.

In cases of advanced arteritis of the lower extremities, hot leg Wraps can be used only after a preliminary course cool foot wraps and turpentine baths, i.e. after at least partial restoration of the lumen of the vessels of the legs or the development of collateral blood vessels.
Simultaneously with the use of hydroprocedures, a manual was prescribed.

Таблица 4

Схема приема ванн с белой скипидарной эмульсией

№ ванны	Количество белой эмульсии, мл	Температурный режим, °С	Продолжительность ванны, мин
1	20	36, через 5 мин 38	15
2	25	Тот же	15
3	30	"	15
4	35	36.5, через 5 мин 38.5	15
5	40	Тот же	15
6	45	"	16
7	50	37, через 5 мин 39	16
8	55	Тот же	16
9	60	"	16
10	65	"	16
11	70	"	17
12	75	37, через 5 мин 39.5	17
13	80	Тот же	17
14	85	"	17
15	90	"	17
16	95	"	17
17	100	"	17
18	105	"	17
19	110	"	17
20	115	"	17
21	120	"	17

Note: The baths are continued with 120 ml of emulsion until the maximum therapeutic effect.
vegetable and dairy diet, as well as herbs that normalize functions of the gastrointestinal tract and possessing antispasmodic and antispasmodic properties. Smoking and the use of alcohol, since only under these conditions it was possible to expect recovery or a significant improvement that cancels the the need for surgery.

If obliterating arteritis was combined with increased arterial arteritis pressure, then at first the blood pressure was reduced with the help of

Таблица 5

Схема приема скипидарных ванн при артерите без повышенного артериального давления

№ ванны	Белая эмульсия, мл	Желтый раствор, мл	Продолжительность ванны, мин	№ ванны	Белая эмульсия, мл	Желтый раствор, мл	Продолжительность ванны, мин
1	20	—	15	17	—	70	20
2	25	—	15	18 и 19	60	—	17
3	30	—	15	20	65	—	17
4 и 5	35	—	15	21	—	80	20
6 и 7	40	—	16	22 и 23	70	—	17
8	—	60	20	24	75	—	17
9 и 10	45	—	16	25	—	80	20
11 и 12	50	—	16	26 и 27	80	—	18
13	—	60	20	28	85	—	18
14 и 15	55	—	16	29	—	90	20
16	60	—	16	30	90	—	18

Note: 1) The temperature regime of the bath should always start from 36 ° C, after 5 minutes bring it up up to 39" (white baths), maintain this temperature until the end of the procedure; in the case of yellow baths, it is necessary to raise the water temperature from 36 "C to 40-41 ° for 15 minutes, do not increase the temperature for the last 5 minutes (keep at the level of 40-41 °); 2) After the 30th bath, you need to do 10 more baths according to the the mode of this bath.

a strict fruit and vegetable diet and yellow turpentine baths, and then gradually switched to mixed turpentine baths (Table 6), if blood pressure remained slightly elevated, or white turpentine baths, if the blood pressure has completely normalized. In Otherwise, the same set of procedures remained the same as in the case of endarteritis without increased blood pressure.

Under our observation were 152 people with obliterating atherosclerosis of the lower extremities. Patients were distributed according to age as follows: up to 40 years old - 17 people, from 41 to 50 years old - 29 54 people from 51 to 60 years old, 31 people from 61 to 70 years old, over 70 years old - 21 people. The duration of the disease is from 2 to 6 years. The first The stage of the disease (spastic) was found in 26 people, the second stage (thrombotic) - in 104 patients, the third stage (necrotic) - in 22 patients patients.
On physiological examination prior to treatment, most patients were noted hypoxemia, a decrease in respiratory

Таблица 6

Схема приема скипидарных ванн при артерите с повышенным артериальным давлением

№ ванны	Белая эмульсия, мл	Желтый раствор, мл	Продолжительность ванны, мин	№ ванны	Белая эмульсия, мл	Желтый раствор, мл	Продолжительность ванны, мин
1	—	20	15	9	—	70	16
2	—	25	15	10	—	75	16
3	—	30	15	11	20	50	16
4	—	35	15	12	25	55	17
5	—	40	15	13	30	60	17
6	—	50	15	14	35	65	17
7	—	55	16	15	40	70	18
8	—	60	16	16	45	75	18

Note: The temperature regime of white and mixed baths should be started from 36 °C, for 10-13 minutes, increase the water temperature to 39 °, the next 5 minutes to be in the bath at a water temperature of 39 °.
functions, a significant decrease in the amplitude of waveforms on the upper and especially in the lower extremities. If the normal osshtor indicators are were equal to an average of 8-15 mm for the upper and lower third of the tibia, then in patients in this group, they were reduced to 1-0.5 mm, sometimes to zero. The capillaroscopic picture in all patients was distorted.

In 2-4 months after the start of treatment, there was usually an improvement in the patients: pain decreased or disappeared, legs became warm, sleep normalized, general well-being improved, patients became vigorous, in men it was restored or enlarged potency (if it was absent or reduced). Waveforms of the vessels of the extremities did not clearly change immediately after treatment, but 2-3 months after its end. Capillaroscopy determined acceleration of blood flow, more intense background coloring, increase in the number of functioning capillaries.

After a full course of treatment, the condition of the patients were usually observed for several years, less often for 6-8 months, after which it was necessary to repeat the entire course of treatment again.

I will cite Two examples of treatment for obliterating endarteritis.
B-noy K., 49 years old. Diagnosis: obliterating endarteritis of the lower extremities, hypotension, chronic bronchitis, emphysema, neurasthenia. The duration of endarteritis is 4 years. Complaints about severe pain in the calf muscles when walking, and recently - night pain in bed, fatigue, shortness of breath during physical tensions.
On examination: satisfactory condition, normal nutrition, pulse rhythmic, 70 beats per minute, blood pressure 95/60 mm Hg. In lungs, harsh breathing. Pulmonary volumes are reduced, ventilation indicators in the upper limits of normal, arterial oxygen saturation blood 92%. Basal metabolism -8%. The skin of the lower extremities is pale, cold, the pulse on the arteries of the legs is not palpable. Vascular oscillations limbs are reduced (to 0-1 mm). Capillaroscopy data: the background is pale, 6-8 capillaries in the field of vision, arterial knees of the capillaries are narrowed, venous - significantly dilated, blood flow slow, with frequent stops. Blood and urine tests are within normal limits.

Since drug therapy did not give noticeable positive results, a course of non-specific treatment was carried out according to the method of Zalmanova: white turpentine baths, hot chest wraps and 30-day fruit and vegetable diet according to Bircher-Benner. Schedule procedures were usual: 2 times a week white turpentine baths, 4 times per week hot chest wraps, 7th day of the week - hygienic bath.

A month after the start of treatment, another procedure was introduced - The cold leg wrap has been replaced by a hot wrap. After 36 white

turpentine baths, there was a pulse on the feet, on the oscillograms oscillations increased (up to 2-6 mm), pain disappeared, blood pressure increased to 110/70 mm Hg. Functions of external respiration normalized, hypoxemia disappeared (98% blood saturation oxygen), the basal metabolism increased slightly (up to -4%), The capillaroscopic picture approached the norm (background pink, 10-12 capillaries in the field of vision, blood flow is rapid). After treatment, the patient was under observation for 3 years.

B-naya A., 64 years old. Diagnosis: obliterating atherosclerosis of the lower end, general atherosclerosis, atherosclerotic cardiosclerosis, hypotension, chronic anacid gastritis, arthritis of the shoulder joints. Complaints of pain when walking in the calf muscles, chilliness of the limbs, sharp soreness and limitation of movement in the area of the right shoulder joints, headaches, insomnia, tinnitus, weakness, rapid fatigue.

On examination: a patient of normal nutrition, skin and mucous membranes pale, moves slowly, climbs the stairs with a large work, the range of motion in the area of the shoulder joints, especially in the right, sharply reduced (due to pain). The pulse is rhythmic, 60 beats per minute. Tones Hearts are muffled, blood pressure is 100/60 mm Hg. In the lungs vesicular respiration. The abdomen is soft, painful in the epigastric region. Blood and urine tests are within normal limits.

Tidal volumes are reduced, hypoxemia (91% of oxygen in the arterial blood), basal metabolism -10 %, Capillaroscopy data: background cyanotic, 5-6 capillaries in the field of view, the shape of the capillaries in the form of dots and commas, Blood flow is not visible, the subpapillary layer is not developed. Legs cold, pale, pulseon both feet is weakened, oscillations of the upper and lower extremities are reduced (0.5-2.5 mm).

The patient was prescribed white turpentine baths, a diet, and between two courses of turpentine baths (each course of 20 baths) and after the second course - Cool and cold toning procedures: rubbing with cold water, local dousing with cold water followed by intensive rubbing the skin and self-massage. As a result of treatment, the general condition of The patient has improved significantly, pain in the limbs and the volume of movements in the right shoulder joint have noticeably increased, fatigue disappeared, sleep was restored. The stomach began to function normally (in no longer need to follow a therapeutic diet). Blood pressure rose to 115/65 mm Hg, the legs became warm, limb oscillograms improve (3 5-6 mm), function breathing normalized, hypoxemia disappeared, basal metabolism was somewhat increased (-5%). Capillaroscopy findings: background pale pink, 8-10 capillaries in the field of view, capillaries are short, convoluted, blood flow fast, no congestion is noted, the papilla layer is pink.

After treatment, the patient was monitored for more than two years at good general condition.

From among the patients with obliterating atherosclerosis (152 people) practical Recovery or significant improvement achieved in 132 patients (Table 7).

Slight improvement or inconclusive treatment occurred only in cases where, for one reason or another, it was impossible to carry out a full range of necessary procedures. This, apparently, appeared the reason for insufficiently successful treatment.

Varicose veins, phlebitis and thrombophlebitis develop due to the with venous blood stagnation, which is facilitated by work related to prolonged standing on their feet, a sedentary lifestyle, and the like Causes. Blood stagnation is one of the causes of the accumulation of microbes and the occurrence of an inflammatory process in the walls of the veins, i.e. phlebitis and thrombophlebitis. In this regard, non-specific treatment should be is aimed at restoring the movement of blood in the veins and revitalizing the general peripheral hemorrhage.

In the treatment of such diseases, Zalmanov recommended hydroprocedures, eliminating venous congestion, namely: soda baths with alum, cold warming compresses on the extremities, a heating pad on the liver, leeches, as well as a fruit and vegetable diet and herbal preparations, activating the activity of the gastrointestinal tract.

Soda baths with alum (200 g of soda and 70 g of alum, 15 min, 38.5 °C) were used 2 times a week, on the rest of the week before going to bed at night A cold warming compress was made for 30 minutes, after which for the whole night The legs were bandaged with a non-tight bandage: gauze, folded 4 times, was moistened vinegar solution (2 tablespoons of 9% solution per 6-8 tablespoons tablespoons of boiled water), then lightly squeezed and put on the The affected area of the leg was covered with a thin layer of cotton wool and bandaged.

With significant varicose veins and severe congestion After a series of soda baths (20), a course of yellow turpentine baths was carried out (30-40). In addition, 2 times a month with a break of 2 weeks were prescribed 3 milk days in bed rest: 200 ml of milk every 2 or 3 hours or lactic acid products (yogurt, kefir, etc.), a total of 1 l. Apart from milk, the patients did not receive any other food on these days, and drinking. Every day, patients used a heating pad on the liver area after main meal (lunch) for 40 min-1 hour salt 1.5 teaspoons in 1/2 cup of water. Every 6 weeks they put leeches on the legs near the venous nodes. All these procedures are active contributed to the restoration of vein tone, acceleration of blood flow, increased diuresis, relieved edema.

Careful adherence to the correct treatment regimen in these cases, as a rule, improved the patient's condition and often there was no need for surgical treatment.

I illustrate what was said with two case histories.
B-naya B., 42 years old. Diagnosis: thrombophlebitis of the deep veins of the right tibia. The duration of the disease is 1.5 years. Complaints of sharp pain in the right calf muscle, so strong that they disrupt night sleep.

Previous treatment (anticoagulants, painkillers) did not improve The patient's condition. On examination: pulse and blood pressure are normal, The liver is not enlarged, the abdomen is soft, painless. On palpation of the right A sharp soreness appears in the lower leg. Clinical blood test and Urine analysis is within the normal range. Diuresis 750 ml per day, fluids taken 1100 ml per day. External respiration functions are normal, capillaroscopic The picture is without features.

Taking into account the general satisfactory condition of the patient and the absence of pathological shifts in the main life-supporting functions were Only local procedures are prescribed: hot wrap of the right leg from knee to the foot for 20 minutes before going to bed at night, after that cold a warming wrap in the same place of the right leg for the whole night. These Procedures were done daily. After 10 days, the pain in the leg disappeared, The patient began to sleep peacefully at night, walk freely. During the years after treatment, there were no recurrences of the disease.

B-naya P., 78 years old. Diagnosis: ulcerative thrombophlebitis in both legs, general atherosclerosis, cardiosclerosis, emphysema. Duration of the disease thrombophlebitis for 6 years. Complaints of severe pain in the legs, shortness of breath, noise in the ears, dizziness, insomnia. Drug treatment and surgery Excisions of veins in the right leg brought only a slight improvement. The patient still walked with great difficulty and most of the day spent in bed.

On examination: a patient of normal nutrition, skin and mucous membranes are pale, blood pressure is 170/70 mm Hg, The pulse is rhythmic, 76 beats per minute, the heart sounds are muffled. In the lungs box sound, single dry crackles. In the area of the lower thirds of both legs there are ulcers (two on the right leg, about 1 cm in diameter each, one on the left, about 1.5 cm in size), the skin around the ulcers infiltrated, pigmented, painful on palpation.
Physiological examination showed pronounced hyperventilation, decreased oscillation of blood vessels in the upper and lower extremities, slowing down blood flow through the capillaries. Non-specific treatment was aimed at restoration of external respiratory functions (hot chest wraps), peripheral circulation (mixed turpentine baths), and to eliminate venous stasis and improve the functioning of venous walls (soda baths with alum, cold wraps of the legs), once a Leeches were placed on the calf muscles (on healthy areas) for 1.5 months.
The procedures were done in the following order: 40 soda baths with alum (through 2 days on the 3rd) on bath-free days, once hot chest wrap, on another day - a cold warming wrap of the legs. After that, the soda baths were replaced by mixed turpentine baths, also once every 3 days or 2 times a week, cold leg wraps Left overnight, leeches were put on the calf muscles 6 times. The treatment continued for a year without interruption. However, the results were worth the effort: the pain in the legs stopped, the swelling disappeared, The ulcers have healed, only pigment spots remain. Headaches and Golovokruappeared very rarely, tinnitus was significantly decreased, shortness of breath at rest disappeared, the general condition of the patient is noticeable improved. Respiratory functions have normalized, blood flow in the capillaries accelerated. After treatment, the patient was monitored for 2.5 years.

Out of 57 in total patients with varicose veins, phlebitis and thrombophlebitis in 47 there was a disappearance of pain in the calf muscles of the legs, swelling, congestion in the veins (Table 8).

Musculoskeletal diseases apparatus

Let's consider Now the last group of patients whose treatment was carried out by us according to Zalmanov's method. These are patients with polyarthritis, arthritis and others diseases of the musculoskeletal system. It is believed that the development of polyarthritis and arthritis can usually be caused by three main Causes: changes in the immunological activity of the body (allergic and infectious polyarthritis), peripheral blood circulation, including in the vessels that feed the joints (dystrophic arthritis), and metabolic disorders (gouty polyarthritis).

Therefore, in the treatment of polyarthritis and arthritis of various etiologies The main attention was directed to cleansing the patient's body from of toxic metabolic products and autotoxins, to reduce the peripheral circulation and normalization

Таблица 8

Результаты лечения больных с заболеваниями вен

Диагноз	Число больных			
	общее	со значительным улучшением	с улучшением	без изменений
Варикозное расширение вен нижних конечностей	30	21	7	2
Флебиты и тромбофлебиты	27	19	5	3
Итого	37 (100 %)	40 (70.2 %)	12 (21.1 %)	5 (8.7 %)

metabolic processes. Non-specific treatment of patients with chronic polyarthritis in the case of its combination with high blood pressure was carried out according to the following scheme: a fruit and vegetable diet mainly from raw fruits and vegetables (sometimes a dairy diet was added to it, for example, in severe osteoporosis) for 30-60 days, yellow turpentine baths (see Table 3), hot chest wraps and local hydrotherapeutic procedures in the area of the affected joint. In addition, patients were given herbal preparations that normalize the activity of the cardiovascular and excretory systems (kidneys, gastrointestinal tract).

In polyarthritis in combination with hypotension, depending on the general condition of the patient, his weight, a desensitizing diet was prescribed. Then, a few days after the beginning of the diet, white turpentine baths were included (see Table 4) and, according to indications, i.e. in the presence of insufficiency of the respiratory function, hot chest wraps. If the patients had impaired functions of the gastrointestinal tract, liver or kidneys, they were prescribed appropriate herbal preparations. Duration of one course of treatment 20-30 baths, after a one-and-a-half-month break - repetition of the course. Patients with chronic polyarthritis with normal blood pressure were prescribed mixed turpentine baths (Table 1). 9).

Таблица 9

Схема приема смешанных скипидарных ванн

№ ванны	Белая эмульсия, мл	Желтый раствор, мл	Температурный режим, °С	Продолжительность ванны, мин
1	20	30	36, через 5 мин 39	15
2	25	30	Тот же	15
3	30	30	"	15
4	35	35	"	16
5	40	40	"	16
6	45	45	"	16
7	50	50	36, через 5 мин 40	16
8	55	55		16
9	60	60	"	17

Note. Continue the procedure according to the 9th bath regimen.
In cases of ankylosing spondyloarthrosis, it was possible to achieve a significant improvement in the patient's condition by using for a long time:

1) hot chest wraps simultaneously with oxygen inhalation;
2) breathing exercises;
3) hyperthermic yellow turpentine baths or hyperthermic mixed baths;
4) in case of excess weight of the patient - a fasting fruit and vegetable diet mainly from raw products;
5) herbal preparations to normalize the functions of the intestines and kidneys;
6) morning contrast shower on the spine area followed by vigorous rubbing and self-massage.

We treated 163 patients with polyarthritis and arthritis, of which 121 were people with chronic polyarthritis of various etiologies (infectious, metabolic, allergic), 8 were diagnosed with ankylosing spondylitis, 34 were diagnosed with heel "spurs". In the overwhelming majority of cases, the duration of the disease of our patients exceeded 10 years. During this time, all kinds of

medications, local physiotherapeutic procedures and resort treatment were used without noticeable success. However, we managed to achieve significant success in 73.6% of patients who were being treated, especially in patients with metabolic polyarthritis.

And here, as usual, I will give two case histories, illustrating the results of non-specific therapy according to Zalmanov for this group of diseases. B-naya M., 30 years old.

Diagnosis: nonspecific infectious deforming polyarthritis, osteochondrosis of the intervertebral discs of the thoracic spine, arthrosis-arthritis of the hip joints, radiculitis, hypotension. The duration of polyarthritis is 8 years. Complaints of pain in the hip and shoulder joints, back, sleep disturbance (due to pain). During the entire period of the disease, she took butadiene, prednisolone, salicylates, was treated at resorts.

However, there was no improvement, moreover, the disease progressed with every year. Due to the lack of effect of drug and resort treatment, it was decided to use non-specific therapy.

On examination: the patient is malnourished, the skin and mucous membranes are pale. Wrist, elbow, ankle and knee joints are severely deformed. The patient is constantly in a forced position (half-bent back), moves around the room with great difficulty. The pulse is rhythmic, 78 beats per minute, heart sounds are clear, blood pressure is 90/60 mm Hg. vesicular respiration in the lungs, abdominal organs without pathology. Acute soreness with slight pressure on the lower thoracic and upper lumbar spine. Osteochondrosis of the intervertebral discs in the lower thoracic and lumbar spine confirmed by X-ray examination

Blood test: erythrocytes 4,250,000, hemoglobin 113 g/l, leukocytes 10 200, ESR 53 mm/h. Clinical urinalysis without any peculiarities. Daily amount of urine is not reduced, the ratio of sodium excreted in the urine and potassium is within the normal range. Basal metabolism +18%. Capillaroscopic picture: pale background, a small number of capillaries in the field of vision, blood flow is slow, intermittent.

The patient was prescribed a fruit and vegetable diet, hot chest bothwhite turpentine baths. After normalizing blood pressure - mixed turpentine baths. A total of two courses were held turpentine baths (40 baths each) and hot chest wraps (30 wraps per course), followed by back and shoulder pain disappeared, pain in the hip joints significantly decreased. Sleep recovered. The patient was able to work outside the home. The deformities of the joints have noticeably decreased.

Physiological examination after treatment revealed normalization capillaroscopic picture. In the blood, hemoglobin increased to normal, the number of leukocytes decreased, ESR 17 mm/h. Basal metabolism +10%. X-ray data have changed insignificantly - they have increased slightly height of the intervertebral spaces.

B-naya I., 67 years old. Diagnosis; chronic deforming polyarthritis, hypertension II A, heart failure II degree, atherosclerotic cardiosclerosis, renal stone disease. The duration of polyarthritis is 11 years. Complaints of severe pain "in all joints", especially in the small joints of the fingers and toes, headaches, shortness of breath, frequent attacks of renal colic (sharp pains in the lower back and when urinating).

Drug and physiotherapeutic treatment remained ineffective.
On examination: the patient is of normal nutrition, the skin and mucous membranes are pale, His face and legs are swollen, he walks with great difficulty, he cannot do himself because of the pain serve (comb your hair, fasten buttons, etc.). Hand joints (hands, elbows and shoulders) and legs (feet and knees) strongly deformed. The pulse is rhythmic, 90 beats per minute, the boundaries of the heart enlarged to the left, heart sounds are muffled, the accent of the second tone is on the aorta. Blood pressure 170/100 mm Hg. There are single dry crackles in the lungs. The abdomen is soft, painless, Pasternatsky's sign on the left is positive.

Blood test: erythrocytes 3,120,000, leukocytes 4800, ESR 28 mm/h. Analysis urine: low specific gravity (1009), weak traces of protein, no sugar, fresh single erythrocytes. Diuresis is reduced (700 ml per day), salt The metabolism is within the normal range, the basal metabolism is -8%. With physiological examination showed a decrease in lung volumes, hypoxemia (93% oxygen in the blood). Capillaroscopic pattern: 5-6 capillaries in the field capillaries in the form of dots, commas, blood flow is slowed, with frequent stops, the subpapillary layer is cyanotic.

The patient was prescribed a fruit and vegetable diet and yellow turpentine baths. After the 3rd bath, the patient reported a noticeable decrease in joint soreness, after the 12th bath, pain in the joints completely disappeared, the movement of arms and legs was restored. The patient could have serve (combed her hair, put on stockings, shoes, fasten buttons etc.).
During the examination after the course of treatment (40 yellow turpentine baths) there was a decrease in swelling of the face and legs, a decrease in arterial pressure (150/85 mm Hg). ESR decreased to 14 mm/h, specific gravity urine increased (1018) and the daily amount of urine increased to 900-1000 ml with the same amount of liquid taken. Basal Metabolism increased (+9%). An improvement in the indicators of the functions of the external respiration and capillaroscopy data, hypoxemia disappeared.

The state of practical health Remained throughout the entire time observation of the patient (2.5 years). Attacks of kidney stone disease During this time, they appeared 2 times in a weak degree.

So, our Practice has shown that a sufficiently long and accurate implementation of the prescribed procedures in 80.8% of cases were accompanied by practical recovery or significant improvement, in 12.8% - insignificant improvement and in 6.4% of cases the treatment remained ineffective (Table 1). 10), but there was not a single case of deterioration of the patient's condition.

Thus, we have received very encouraging treatment results by the simplest means, without using either complex equipment or expensive imported medicines. What are the main advantages and disadvantages of the therapeutic methods offered by Zalmanov? Their main The advantage is the effectiveness of the treatment of diseases, it is difficult amenable to drug therapy, no harmful side effects complications, as well as the fact that the use of therapeutic methods effects according to Zalmanov sometimes allow you to reduce doses several times of potent chemotherapy drugs without reducing their positive effect.

Their advantage should also be attributed to the fact that they are simple, do not require bulky, complex, expensive equipment, they can be mastered by nurse and successfully use, of course, under the mandatory Doctor's control. In addition, the advantages of treatment methods for Zalmanov should also include the possibility of using them not only in polyclinical, but also at home (under medical supervision) Each patient in need of balneotherapy can health or for other reasons to get into a sanatorium, and for those patients, who can use baths in sanatorium conditions, staying there is often not enough to get the maximum therapeutic effect. In polyclinics and especially at home, the term and The treatment season is not limited.

Таблица 10

Общие результаты неспецифического лечениях хронических больных по Залманову

Нозологическая группа	Число больных			
	общее	со значительным улучшением или практически здоровых	с незначительным улучшением	без изменений
Сердечно-сосудистые заболевания	330	270 (81.8 %)	33 (10.0 %)	27 (8.2 %)
Заболевания опорно-двигательного аппарата	163	120 (73.6 %)	26 (15.8 %)	17 (10.6 %)
Заболевания дыхательной системы	284	238 (83.8 %)	40 (14.0 %)	6 (2.2 %)
Итого	777 (100 %)	628 (80.8 %)	99 (12.7 %)	50 (6.4 %)

Do they have Are the methods described disadvantages? Yes, they do. First, they require more long-term (from several months to a year or more) treatment for getting the maximum effect. But the diseases that we have succeeded in cured, lasted years, or even a decade! The exceptions are only acute diseases of the lungs and bronchi, which with the help of hot Breast wraps can be cured in a few days. The second disadvantage - the absence of ready-made turpentine solutions and 100° mercury thermometers with a division price of 1 °C.

Such a therapeutic technique of Zalmanov as a hot chest wrap, can be invaluable mainly for newborns children. Treatment of newborns with pneumonia or bronchitis is not It needs injections in the presence of hot chest wraps. About this testifies to the positive experience of treatment according to Zalmanov in the Gorky Pediatric Institute, even premature sick children, reduced their high mortality to almost zero. Such treatment will remove the danger AIDS infection, this plague of the XX, and maybe XXI century. The mortality rate is very high in our country, in some regions it is higher than in a number of African countries.

Of course, the method of non-specific treatment can contribute to the only to reduce early infant mortality from age zero onwards, but also an increase in the life expectancy of adults. Therefore, it is possible to to say with certainty that, despite the labor intensity of some techniques non-specific therapy, it can rightfully take its place in the complex of therapeutic means of modern medicine.

II. Diet Swiss doctor M. Bircher-Benner

During the the first 4 days: allowed food - all fruits and vegetables, raw and cooked, compotes, jam, dates, figs, almonds, walnuts, coffee, tea, sugar (not chocolate) candies, honey. All vegetables, except potatoes, raw or boiled in water without salt, vinegar, lemon, vegetable oil with vegetables; forbidden food - meat, fish, sausage, eggs, bread, crackers, dough products, potatoes, roasts, soups, meat broths, chocolate, alcohol. To this 4-day regime is added: on the 5th day - one crackers, on the 6th day - in the evening a few potatoes (about 300 g), boiled in water without salt, you can add milk and make a puree, but without

butter, on the 7th-8th day - 2 rusks and 0.5 liters of milk, on the 9th day - 1 egg, on the 10th-13th day - cottage cheese (100 g), butter (20 g), on the 14th day - rice or semolina porridge for 3/4 liters of milk. Starting from the 15th day, you can eat 100 g of boiled meat no more than 2 times a week, at lunch. From the 25th day - regular food, but 2 days a week, not following one another (e.g. Monday and Friday), repeat the regimen for the first 4 days.

Sample dishes recommended by Bircher-Benner
Milk and nut dish. Take 2 tablespoons of grated apples and oatmeal, pre-soaked for 2 hours in water, 50 g crushed walnuts, mix everything, add juice from half lemon, sugar to taste, season with 2 tablespoons of sour cream.

Plum dish. Pass 200 g of soaked prunes through meat grinder, add 2 tablespoons of soaked and rubbed through the oatmeal sieve, juice from half a lemon. Season with sour cream, sugar.

Oatmeal dish. 2 tablespoons soaked rolled oats dilute with water until mushy (do not boil), add 1/3 cup finely chopped walnuts, juice from half a lemon, all mix.

Blackcurrant puree. Soak 2 tablespoons of semolina in 4 tablespoons of cold boiled water. Put 1/2 a glass of blackcurrant mashed with sugar, or blackcurrant jam currants, mix everything.

Raspberry puree. Soak 2 tablespoons of semolina in 4 tablespoons tablespoons of water. Put 1 tablespoon of honey in this mass and mix with puree of 150 g of raspberries, sprinkle with grated walnuts on top.

Apple and carrot dish. 2 grated apples, 2 tablespoons soaked semolina, 2 tablespoons of grated carrots and the same finely mix chopped walnuts, season with sour cream, sugar to taste (but not more than 1 teaspoon).

Plum or cherry mousse. Remove the seeds from 200 g of berries, wipe the pulp through a sieve, mix with 1 tablespoon of honey and 100 g of finely chopped walnuts.

Apple and nut dish. 2 tablespoons grated apples, 10 g semolina cereals, soaked in 3 tablespoons of boiled water, 2 tablespoons crushed walnuts, 2 tablespoons condensed milk, juice from half a lemon, mix everything.

Apple and honey dish. 3 grated apples, 2 tablespoons pre- soaked oatmeal, 1 tablespoon condensed milk, 1 a tablespoon of honey, mix everything.

Berry dish. Mash 300 g of berries (strawberries, raspberries) until smooth mass, mix with 1 tablespoon of soaked oatmeal, 1 a tablespoon of condensed milk and juicem of half a lemon.

III. Fees, medicinal plants

Breast preparations (expectorant and diaphoretic)

Collection No 1:
coltsfoot leaves 200 g oregano herb 100 g chamomile flowers 200 g

Method of preparation:
chop the leaves, herb and flowers, mix everything, 2 tablespoons of the collection brew 0.5 liters of boiling water, infuse in a thermos for 5-6 hours, drink for half a glass 3 times a day before meals in a warm form. It is used in dry bronchitis (expectorant).

Collection No 2:
plantain leaves, St. John's wort herb, linden flowers 200 g

each Method of preparation
as in No 1. It is used for acute bronchitis (diaphoretic, disinfectant).

Collection No 3:

rosemary herb 200 g birch buds 50 g oregano herb 100 g leaves stinging nettle 50 g

Method of preparation:
chop everything, mix, pour 2 tablespoons of the collection with 0.5 l of steep boiling water, boil for 10 minutes over low heat, infuse for 30 minutes, drink 1/3 glass 3 times a day after meals. It is used for chronic bronchitis (expectorant, disinfectant, anti-inflammatory).

Collection No 4:
oregano herb 100 g marshmallow root, coltsfoot leaves 200 g

each **Method of preparation:**
pour 2 tablespoons of finely chopped mixture with 0.5 liters of boiling water, Infuse for 20 minutes, strain, drink warm 1/2 cup 3 times a day before meals. Breast tea is an emollient and enveloping agent for cough and inflammation of the respiratory organs.

Harvest No 5:
coltsfoot leaves 200 g birch leaves 100 g chamomile flowers 200 g rosemary herb 200 g oregano herb 100 g

Method of preparation and application as in No 3. Used in chronic pneumonia, bronchial asthma.

Harvest No 6:
plantain leaves 300 g marshmallow root 200 g licorice root naked 300 g coltsfoot leaves 400 g sage leaves 300 g

Method of preparation: pour 2 tablespoons of the collection (without the top)
with a glass of cold water, infuse for 2 hours, then boil over low heat for 5-7 minutes, after cooling, strain, drink warm by 1/3 glass 3-4 times a day. It is used for bronchitis.

Collection No 7:
linden flowers, St. John's wort herb 200 g each, chamomile flowers 100 g

Method of preparation: brew 4 tablespoons of the collection 0.5 l boiling water, infuse for 30 minutes, strain, squeeze, take 1/2 glasses warm 30 minutes before meals 3-4 times a day.
It is used for pneumonia as a diaphoretic and disinfectant means.

Collection No 8:
raspberry fruits, linden flowers, coltsfoot leaves 200 g

each **Method of preparation**: chop, mix, 2 tablespoons Brew the mixture with 2 cups of boiling water, infuse for 20 minutes, drink hot for 1/2 cup 4 times a day. Diaphoretic tea.

Herbs used for diseases of the cardiovascular system

Collection No 1:
motherwort herb 300 g
dried grass 300 g
wild rosemary herb 200 g
kidney tea 100 g

Method of preparation:
Brew 2 full tablespoons of crushed mixture with 2 cups boiling water, boil for 5 minutes, infuse for 4 hours in a thermos, drink in warm 1/2 cup 3 times a day after meals. It is used in hypertension.

Harvest No 2:
Adonis herb 100 g

hawthorn flowers 200 g
birch leaves 100 g
motherwort herb 200 g
dried grass 200 g
horsetail herb 100 g

Method of preparation:
chop leaves, herb and flowers, mix, 2 tablespoons mixture brew 0.5 liters of boiling water, infuse in a thermos for 6 hours, drink for Half a glass 3 times a day 15-20 minutes before meals in a warm form. Applies with hypertension in combination with complicated cardiac deficiency of I and II degrees in the stage of compensation and subcompensation.

Collection No 3:
Adonis herb 100 g
hawthorn fruits 100 g
peppermint herb 200 g
motherwort herb 300 g
dried grass 200 g
kidney tea 100 g

Method of preparation:
grind everything, mix, infuse 2 full tablespoons of the mixture for 2 glasses of cold water for 3 hours, cook for 5 minutes, infuse for 15 minutes, Drink 1/2 cup 4 times a day 20 minutes before meals in a warm form. It is used for hypertension and symptomatic hypertension with angina pectoris.

Harvest No 4:
yarrow herb 200 g
nettle herb 100 g
birch leaves 150 g
hawthorn fruits 200 g
rose hips 300 g
motherwort herb 200 g
lingonberry leaves 100 g

Cooking
method as in No 2. It is used for atherosclerosis in combination with increased oral blood pressure.

Collection No 5:
helichrysum flowers 200 g
hawthorn flowers 100 g
kidney tea 100 g
motherwort herb 200 g
rosehip fruits 200 g
buckthorn bark 200 g

Method of preparation:
brew 2 tablespoons of the mixture with 0.5 liters of boiling water, boil for 10 minutes, Strain through gauze, take 1/2 cup in the morning and in the evening.

Preparations used for diseases of the motor organs

Collection No 1:
juniper berries 100 g calendula flowers 50 g buckthorn bark 50 g leaves stinging nettle 100 g birch leaves and horsetail herb 200 g.

Method of preparation:
pour 3 tablespoons of the collection with 0.5 liters of boiling water, boil after 10 minutes, Cool and strain through gauze, drink 1/2 cup 4 times a day of hot broth. It is used for infectious polyarthritis.

Harvest No 2:
chamomile flowers 100 g St. John's wort herb 200 g birch leaves 300 g leaves lingonberries 100 g joster 150 g horsetail herb 200 g

Method of preparation:
pour 2 tablespoons of the collection with 0.5 liters of boiling water, boil for 10 minutes, Infuse for 30 minutes, drink 1/2 cup 3 times a day before meals in warm form. It is used for metabolic polyarthritis.

Harvest No 3:
black elderberry flowers 200 g juniper fruits 100 g joster 50 g flowers linden 300 g pine buds 200 g kidney tea 100 g

Preparation
method as in No 2. It is used for gout, rheumatism.

Harvest No 4:
rosemary herb 200 g, buckthorn bark 100 g, yarrow herb 150 g oregano herb 200 g lingonberry leaves 200 g

Method of preparation:
pour 2 tablespoons of the collection with 1 liter of boiling water, infuse in a thermos For 8 hours, strain, drink 1/4 cup 4 times a day after meals. It is used for gout with obesity.