



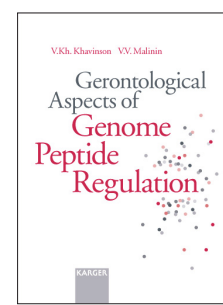
## The status of Professor V.H. Khavinson in the scientific world

The author of the theory of peptide regulation, cellular systems and functions, as well as the creator and developer of a new class of geroprotective drugs.

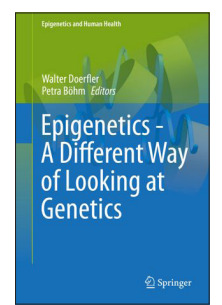
The main areas of scientific activity are gerontology, biochemistry, immunology.

For his practical and scientific achievements from 2011 to 2015 he was elected as President of the European Gerontology Association. and geriatrics (Founded in 1950). Today he remains a member of the Executive Committee and the financial manager.

- Over 200 patents. (of which 86 are from abroad in Australia, Europe, Canada, USA, Switzerland, Japan, etc.);
- More than 1000 scientific papers;
- More than 100 international conferences;
- More than 3000 studies;
- Dozens of monographs (2 monographs published in Sweden and Switzerland).



Gerontological Aspects of Genome Peptide Regulation

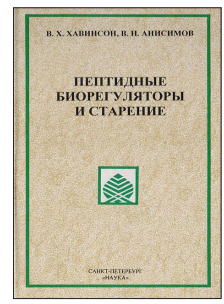
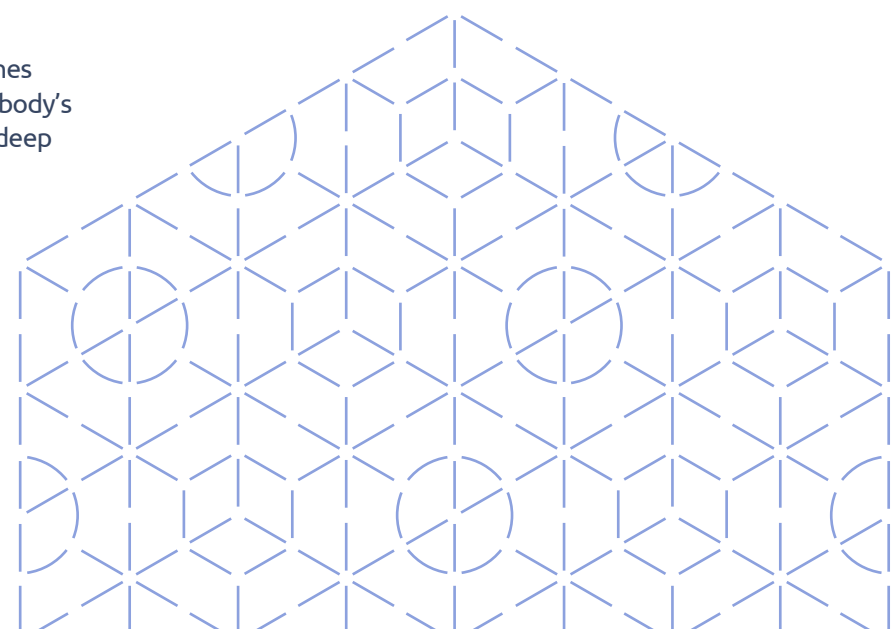


Epigenetics — a Different Way of Looking at Genetics

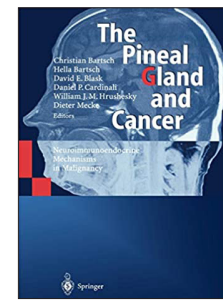
## The Peptide Bioregulator Company / Sweden

Thanks to their ability to influence the activity of genes and stem cells, Vitual bioregulators can activate the body's hidden reserves and accelerate recovery even after deep disturbances.

Extend your life



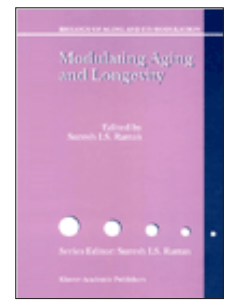
Peptide bioregulators and aging.



Experimental studies of the pineal gland preparation Epithalamin. The pineal gland and cancer

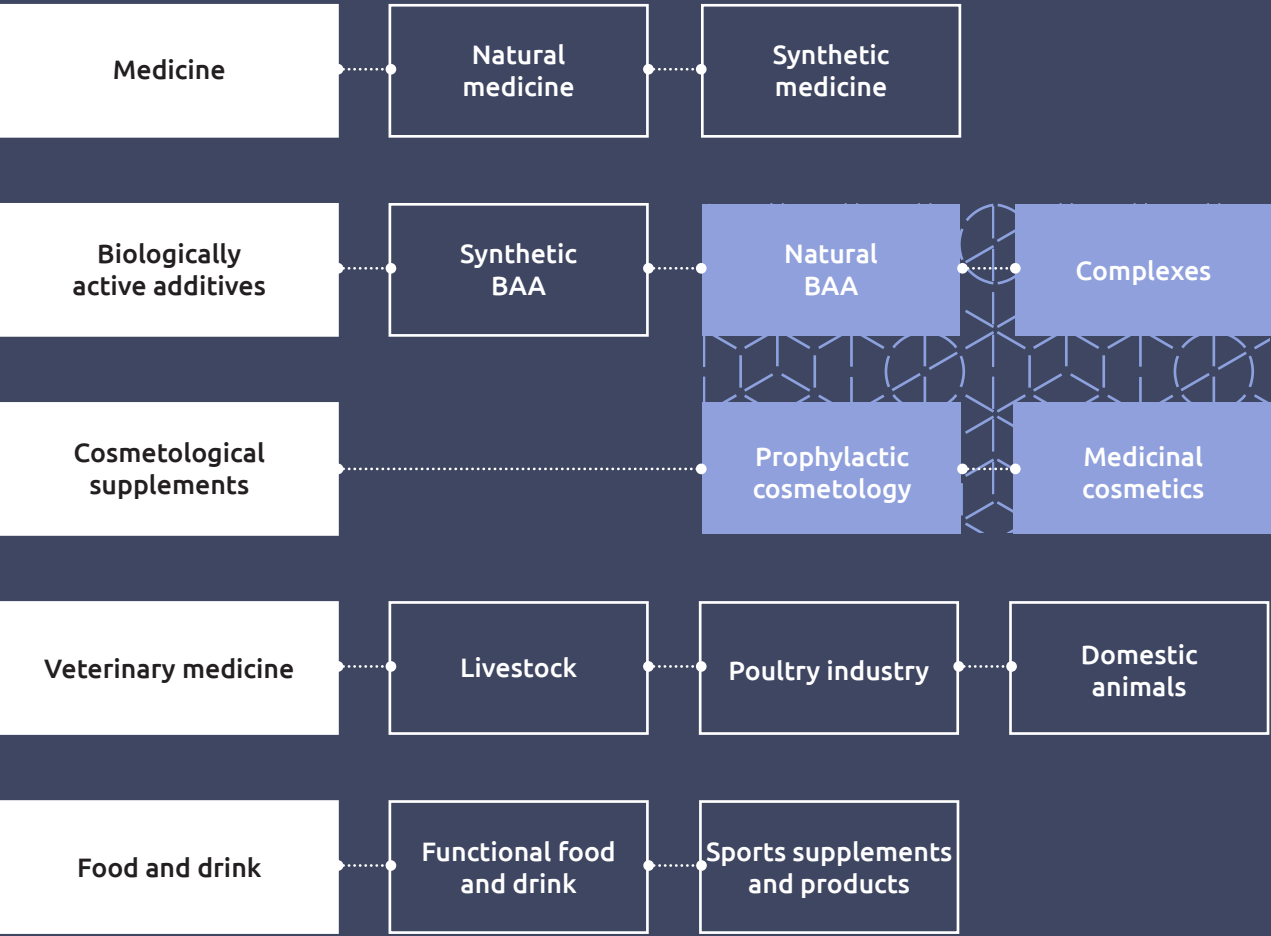


A unique technology for the restoration of retinal function in various pathological processes.

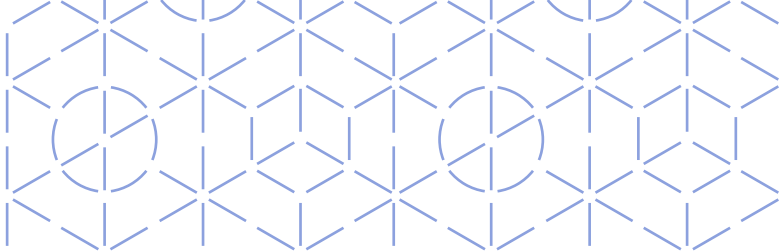


Small peptide-associated modulation of aging and longevity. Modulating aging and longevity

# Areas of application for peptides



2



## Khavinson’s short bioregulatory peptides

- ⬡ The basis of any organism is proteins. Well-coordinated work of all organs and systems depends on the rate of protein synthesis, and peptides are the main regulators of the assembly of protein molecules.
- ⬡ In the process of ageing the quantity of regulatory peptides decreases, which negatively influences the process cells renewal. It is aggravated by the fact that under the influence of stress-factors some parts of DNA are deactivated and the process of reading of necessary information for protein production stops. This leads to pathologies, hormonal breakdowns and other disorders.
- ⬡ Peptide complexes renew cells and restore the functions of organs, which leads to the elimination of health problems, improving health and prolonging active longevity.

## Increasing life span

The use of peptide bioregulators has significantly contributed to the reduction of the aging rate and increased survival rate of elderly patients (observation period - 15 years), which is confirmed by:

- 1

Improvement of physical performance
- 2

Decrease in the rate of aging of the cardiovascular system
- 3

Normalization of metabolism
- 4

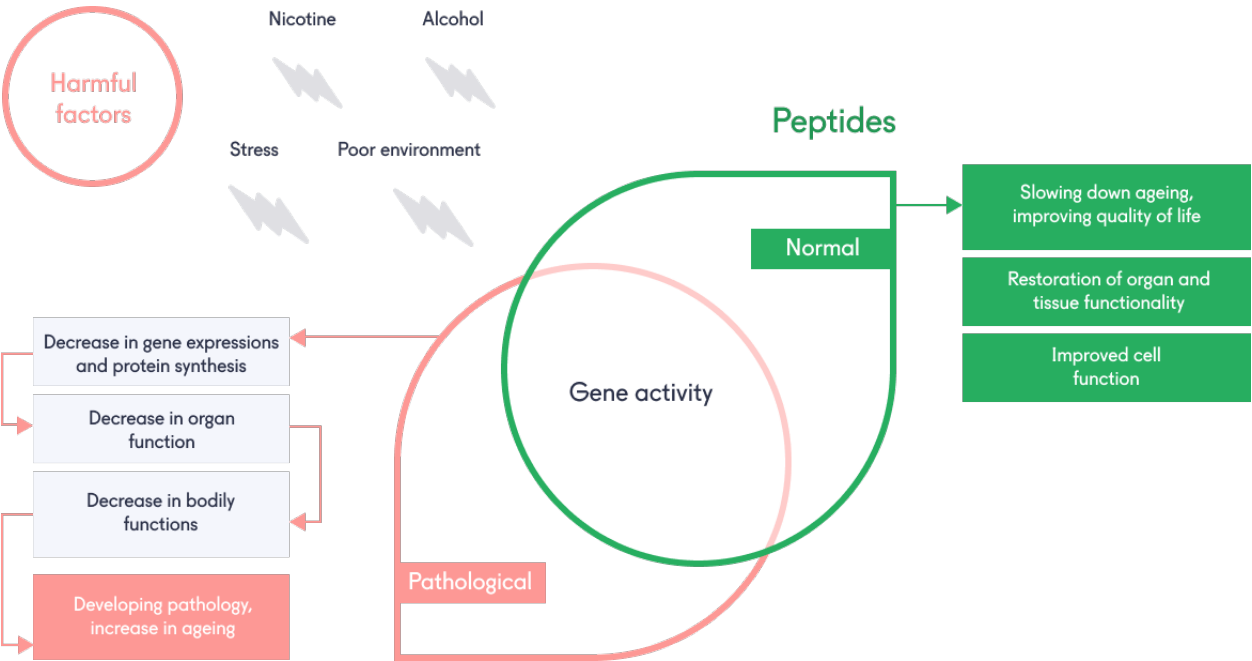
Increase in brain function
- 5

Increased resistance to viral and bacterial diseases
- 6

Increased resistance to stress

3

## Peptide bioregulation graphic



## Effectiveness of thymus and epiphysis peptide usage

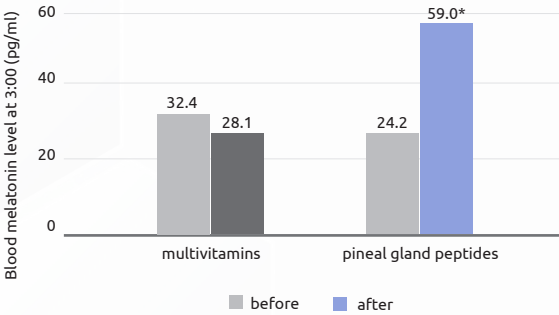
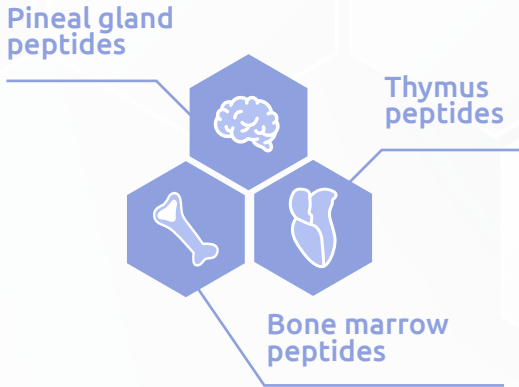
Indicators	Changes after peptide consumption	Extent of change
Physical performance	Increase	factor of 1.8 to 1.9 times
Fatigue from exercise	Decrease	factor of 2,3 – 2,5 times
Memory of current events	Improvement	by 56%
Frequency of acute respiratory infections & flu	Decrease	factor of 2,4 times
T-lymphocyte function	Increase	by 24 – 43%
Overall blood antioxidant activity	Increase	by 53%
Melatonin concentration in blood	Increase	factor of 2,4 times
Length of blood cell telomeres	Increase	by 14-16%
Bone density	Increase	in 73-83% of patients
Survival rate (15 years of observation)	Increase	by 67%



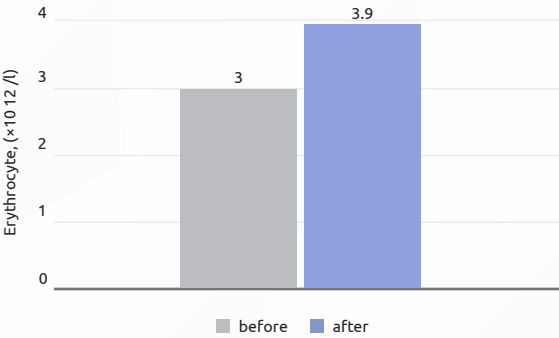
Biologically active food supplement  
Peptide Complex PROTECTOR 3 Plus

The PROTECTOR 3 Plus peptide complex is used in medical practice as a means of health preservation and prevention of pathologies, as well as for recovery after radiation and chemotherapy. Numerous studies have shown that the use of peptides, which are part of the PROTECTOR 3 Plus, improves immune and neuroendocrine system functions, and slows down the development of age-related disorders.

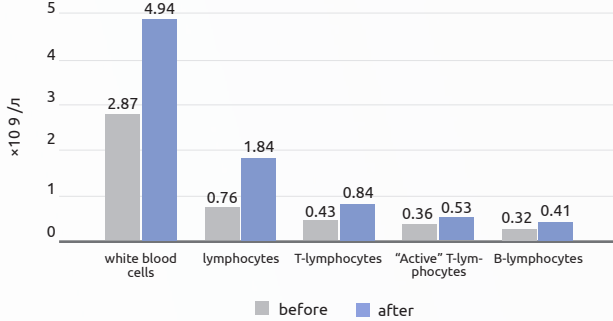
- Normalises the work of neuroendocrine organs;
- Stimulates the immune system;
- Improves hematopoietic function of the bone marrow;
- Restores the synthesis of endogenous melatonin;
- Increases efficiency and reduces the feeling of fatigue;
- Normalises circadian rhythms.



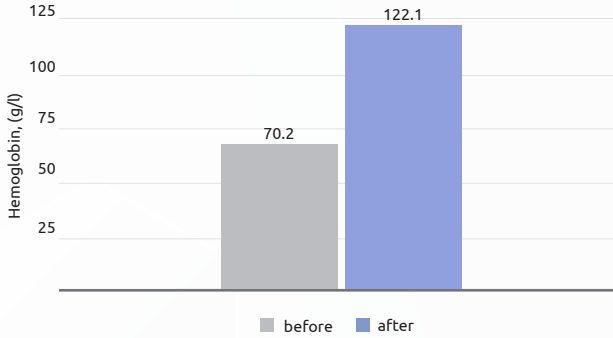
1. Effect of epiphysis peptides on melatonin levels in blood.\*



2. The impact of PROTECTOR 3 Plus peptide complex on erythrocyte content in blood serum of cancer patients after radiation and chemotherapy.



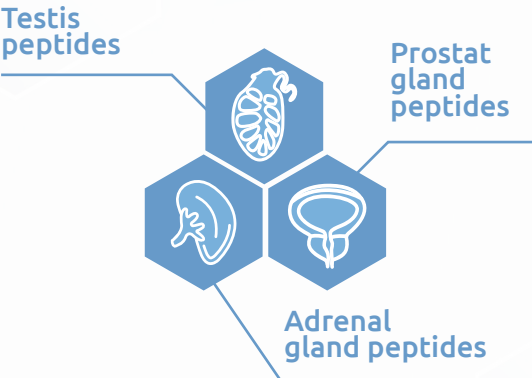
3. Impact of PROTECTOR 3 Plus peptide complex on immunological parameters in the blood of cancer patients after radiation and chemotherapy



4. Impact of PROTECTOR 3 Plus peptide complex on hemoglobin content in blood serum of cancer patients after radiation and chemotherapy.

Biologically active food supplement  
Peptide Complex POLO 3 Plus

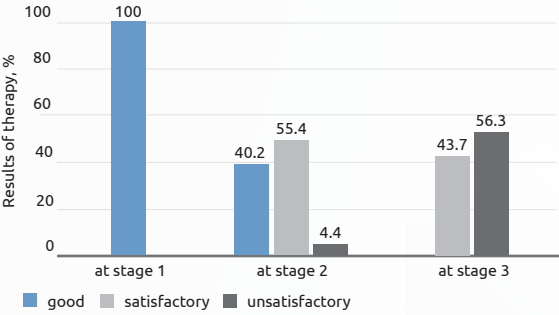
Reception of POLO 3 Plus promotes regulation in the hormonal background, accelerates the restoration of the function of the prostate gland and reproductive system, prevents the development of atrophic processes in these organs, reduces the risk of pathology of the sexual and urinary systems. The use of this peptide complex helps to improve overall health and increase libido. POLO 3 Plus regulates the level of sex hormones in the blood. Due to adrenal peptides the reaction to stress factors is restored, resistance to stress hormone emissions is increased.



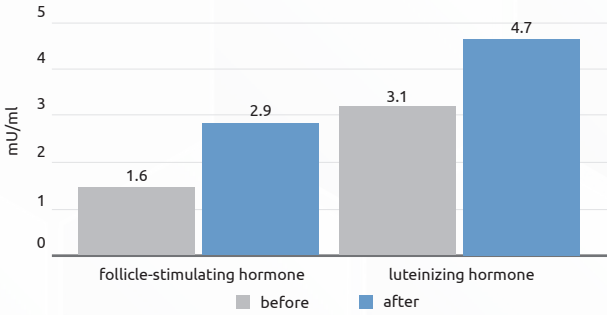
- Improves the reproductive function;
- Normalises hormonal status;
- Improves the quality of the ejaculate;
- Increases potency;
- Increases testosterone production;
- Restores function of the prostate gland.

Clinical trials were conducted on patients between 38 and 65 years of age diagnosed with benign prostate hyperplasia (BPH) and chronic prostatitis. At the end of treatment, pain was completely eliminated in 77.0% of patients and significantly reduced in 20.3% of patients with relevant complaints. Of the patients suffering from sexual dysfunction, 67.3% indicated

complete recovery and 31.1% noted improvement. By the end of treatment 56.2% of patients reported restoration of libido. Pollakiuria (frequent daytime urination) has completely stopped worrying 91.6% of patients. The need for night-time urination has disappeared. Stranguria (difficulty in urination) ceased to worry 88.4% of patients.



5. Evaluation of the results of therapy with prostate peptides on subjects with chronic prostatitis.



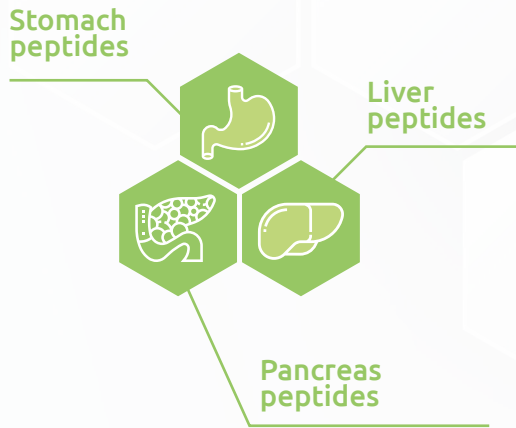
6. The effect of peptides of testes on sex hormones in the blood.

Biologically active food supplement  
Peptide Complex GASTRO 3 Plus

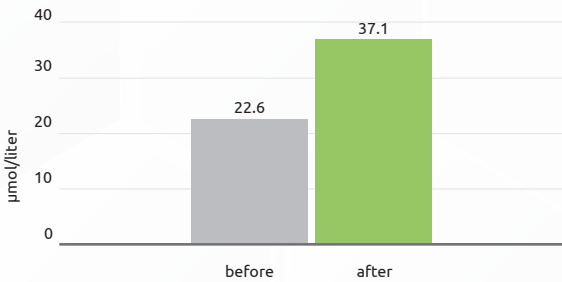
Consumption of GASTRO 3 Plus regulates the digestive process, accelerates the restoration of digestive system functions, prevents the development of atrophic processes in the gastrointestinal tract, and reduces the risk of developing pathological conditions.

Liver peptides, which are part of the complex, improve cell metabolism, fat and carbohydrate metabolism, bile production. Normalization of digestion amongst subjects with chronic disorders of the gastrointestinal tract, including gastritis, is associated with the regulatory effect of gastric peptides on the function of the cells of the mucous coat of the stomach and duodenum.

- It regulates digestive processes;
- Improves the function of the gastrointestinal tract;
- Normalises lipid and carbohydrate metabolism;
- Regulates the secretory function of the pancreas;
- Prevention of gastritis and stomach ulcer;
- Accelerates healing of stomach mucosa defects.

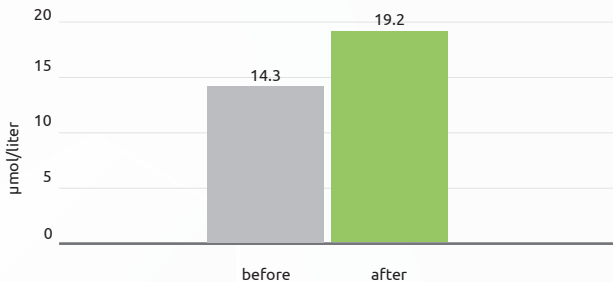


A clinical study of the GASTRO 3 Plus peptide complex was conducted on patients with chronic gastritis. As a result of the conducted research it was established that the use of



7. Influence of GASTRO 3 Plus peptide complex on total acidity on an empty stomach in patients with chronic gastritis

GASTRO 3 Plus contributed to the smoothing of clinical manifestations of chronic gastritis in 86% of cases, with the greatest effect in the older age group.



8. Influence of GASTRO 3 Plus peptide complex on free HCl level in patients with chronic gastritis.

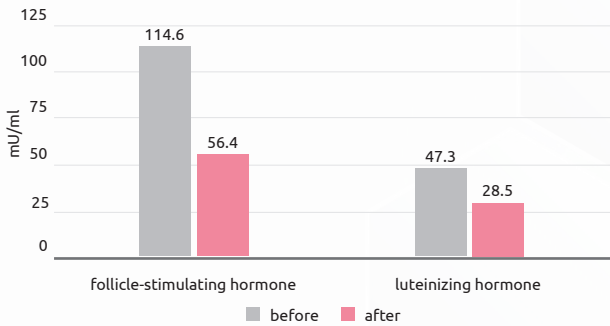
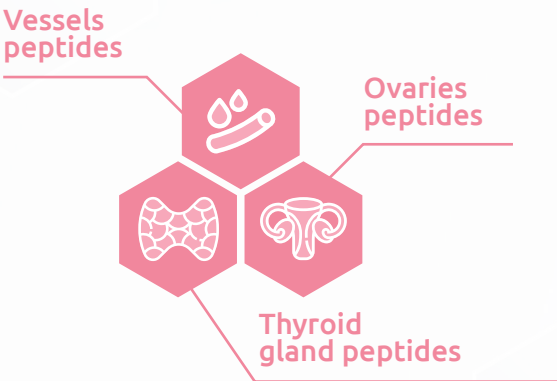
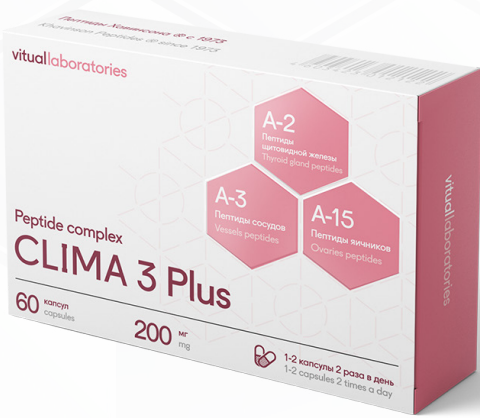
Biologically active food supplement  
Peptide Complex CLIMA 3 Plus

Consumption of CLIMA 3 Plus regulates metabolism in the ovaries and uterus, accelerates the restoration of reproductive system function in women, prevents the development of atrophic processes, reduces the risk of pathological conditions. Normalization of hormonal indices in women after application of CLIMA 3 Plus is accompanied by improvement of clinical indices of menopausal syndrome and indicates that adaptation of the organism is restored.

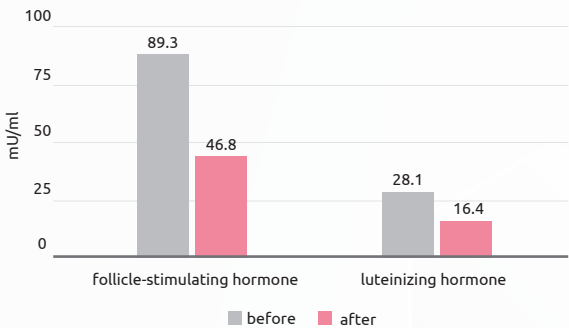
The clinical study involved women aged 45 to 53 years diagnosed with menopausal syndrome of mild to moderate severity and women between 38 and 43 years of age, diagnosed with ovarian exhaustion syndrome (early climacteric syndrome).

In patients with primary ovarian insufficiency, the use of the CLIMA 3 Plus peptide complex, in addition to the conventional therapy, caused the normalization of the menstrual cycle in 67% of cases and contributed to the reduction of astheno-neurotic manifestations of the disease.

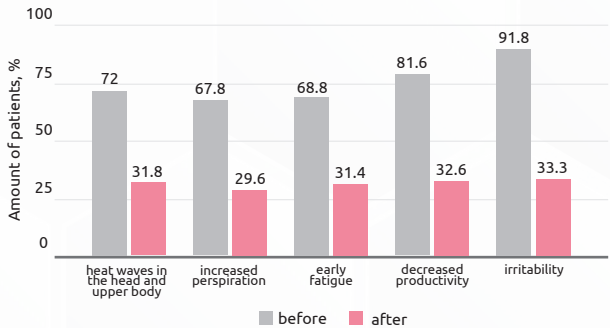
- Restores the functions of the reproductive system;
- Improves the function of the endocrine system;
- Restores the menstrual cycle;
- Regulates the synthesis of its own hormones;
- Prevents the development of osteoporosis;
- Reduces the risk of ovarian pathology.



10. The effect of CLIMA 3 Plus peptide complex on the content of pituitary hormones in blood serum of patients with ovarian exhaustion syndrome.



9. The influence of CLIMA 3 Plus peptide complex on the pituitary hormone content in blood serum of patients with menopausal syndrome.



11. Dynamics of subjective indicators in patients with menopausal syndrome.



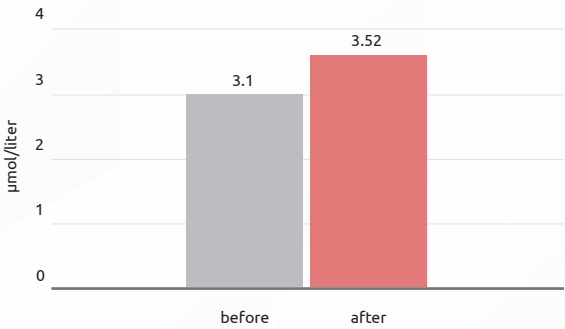
## Biologically active food supplement Peptide Complex CARDIO 3 Plus

The CARDIO 3 Plus peptide complex regulates metabolism and accelerates the restoration of functionality in the cardiovascular system. It prevents the development of atrophic processes of blood vessels and heart, and reduces the risk of developing pathological conditions. The dynamics of changes in indicators suggests that among the subjects who took peptides, the number of complaints of shortness of breath, intermittent pain in the heart area and the frequency and duration of angina attacks have decreased.

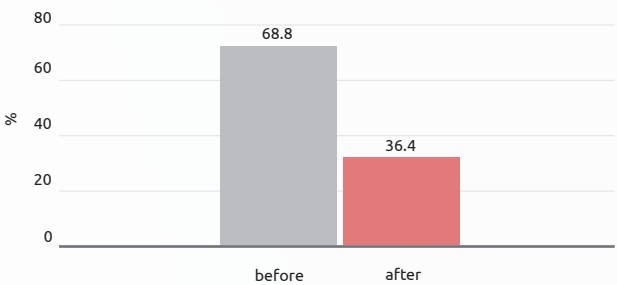
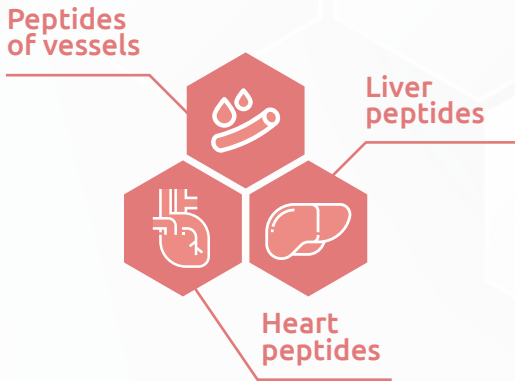
Clinical studies of the effectiveness of the CARDIO 3 Plus peptide complex were completed on patients with coronary heart disease.

The results of the study showed that patients who took the Cardio 3 Plus peptide complex decreased the number of complaints about their general condition, shortness of breath, periodic pain in the area of the heart, feeling of rapid heartbeat, the frequency and duration of angina attacks authentically decreased, 56% of patients managed to halve the daily dose of prolonged nitrates with persistent reduction of periods of chest pains in comparison with the initial level before treatment.

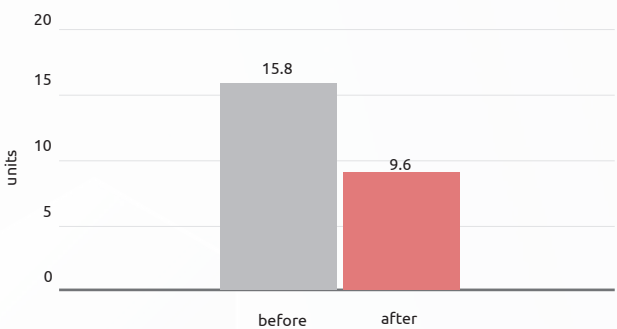
- Restores the function of the cardiovascular system;
- Improves the condition of capillaries;
- Normalises myocardial function;
- Reduces the risk of atherosclerosis;
- Improves the blood lipid profile;
- Helps to reduce blood cholesterol levels.



12. Potassium levels in the blood of patients with ischemic heart disease.



13. Frequency of angina attacks in patients with coronary heart disease.



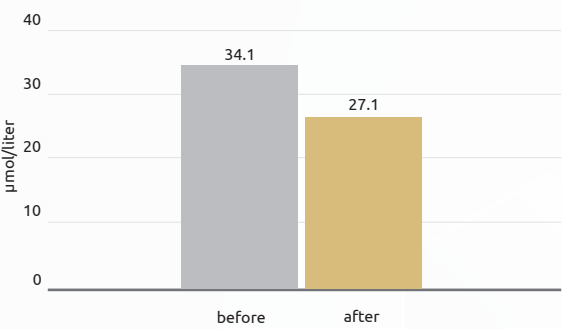
14. Energy expenditure index in patients with ischemic heart disease.

## Biologically active food supplement Peptide Complex NEPHRO 3 Plus

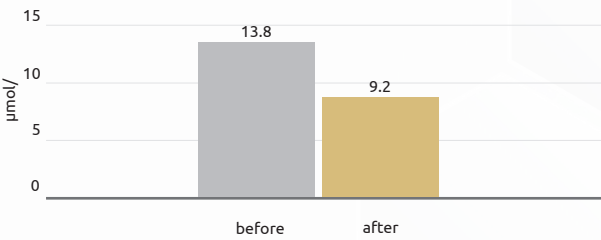
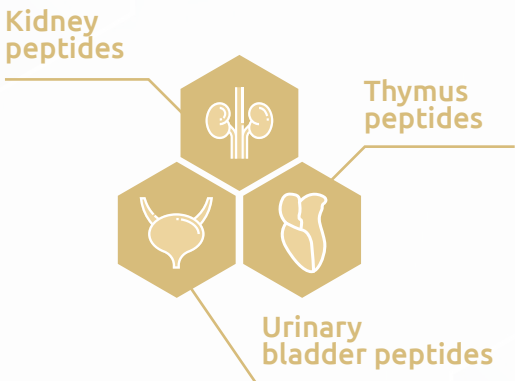
NEPHRO 3 Plus regulates metabolism in the urinary system tissues and accelerates the restoration of its functions, prevents the development of atrophic processes in the bladder and kidneys, reduces the risk of developing pathological conditions. Thymus peptides help improve immune response, accelerate the recovery of renal tissue and urinary system in inflammatory diseases, and reduce the number of relapses.

NEPHRO 3 Plus Peptide Complex clinical trials were conducted on patients with gouty nephropathy. The result has established that the application of the NEPHRO 3 Plus peptide complex reduced clinical symptoms of gouty nephropathy in 78% of such cases.

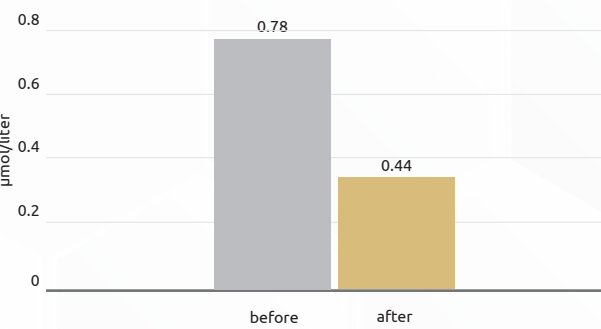
- Improves the function of the urinary system;
- Eliminates urinary incontinence;
- Normalises the metabolism of the bladder and kidneys
- Restores the filtration capacity of the kidneys;
- Improves mineral metabolism in kidney tissues;
- Accelerates regeneration of the mucous membrane of the bladder.



15. Effect of NEPHRO 3 Plus peptide complex on residual nitrogen level in the blood in patients with gouty nephropathy.



16. Effect of NEPHRO 3 Plus peptide complex on urea Level in the blood of patients with gouty nephropathy.



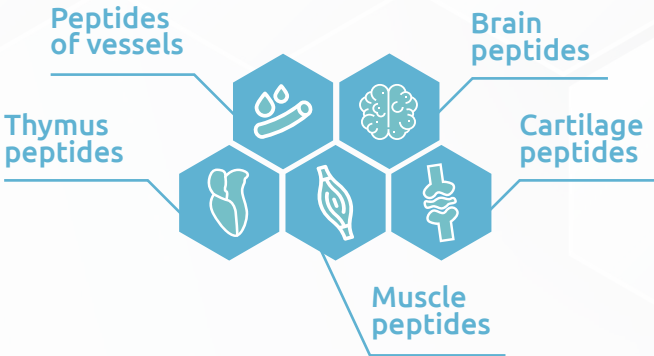
17. Effect of NEPHRO 3 Plus peptide complex on uric acid level in the blood of patients with gouty nephropathy.

Biologically active food supplement  
Peptide Complex SPORT 5 Plus

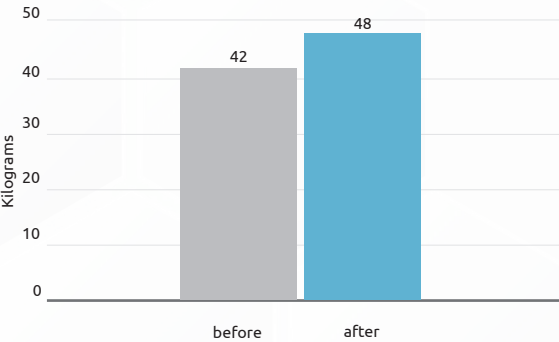
The SPORT 5 Plus peptide complex increases endurance and strength. Peptides in the complex regulate metabolism, accelerate recovery from increased physical activity, prevent the development of atrophic processes, and reduce the risk of developing pathological conditions of the joints, spine, blood vessels, brain, immune system and muscles. During a course of consumption attention and the speed of reaction increases, which manifests itself in the improvement of sports performance in different age groups.



- Restores the body after physical activity;
- Increases strength levels;
- Increases endurance performance;
- Slows down the atrophy of joints, cartilage and bone tissue;
- Normalises metabolism in bone and cartilage tissue;
- Prevents the development of pathology of the musculoskeletal system.

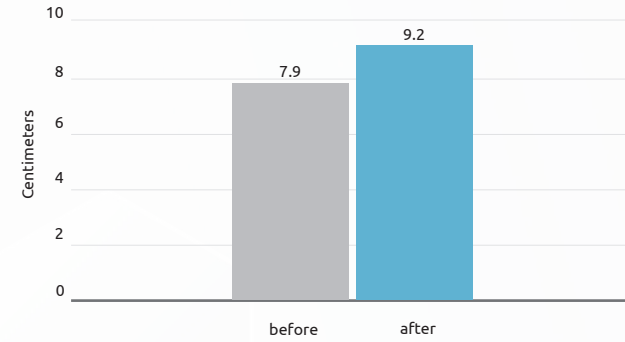


Clinical study of the effectiveness of the SPORT 5 plus peptide complex was completed on sports veterans aged 40 to 65 years, specializing in rowing and athletics. After



18. The effect of the SPORT 5 Plus peptide complex on dynamometry.

taking the SPORT 5 Plus peptide complex, the surveyed people felt less fatigue during training periods compared to the initial level, as well as faster muscle recovery from stress.



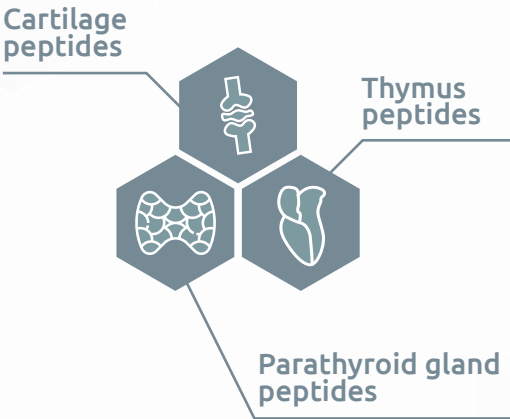
19. The effect of the SPORT 5 Plus peptide complex on flexibility.

Biologically active food supplement  
Peptide Complex OSTEO 3 Plus

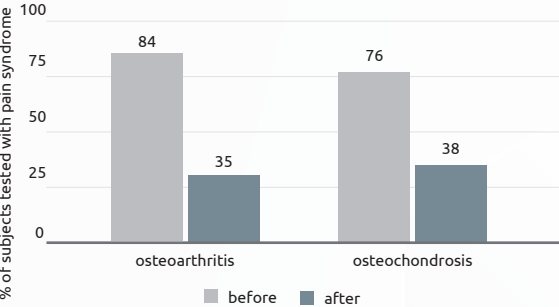
OSTEO 3 Plus normalises the functions of the musculoskeletal system, prevents the development of atrophic processes in the cartilage and bone tissues, immune system tissues and parathyroid gland. Peptides contained in the complex reduce the risk of osteoporosis in older age groups. Studies show that OSTEO 3 Plus normalises calcium-phosphorus metabolism and bone mineral density.

In clinical studies, a high efficiency of the peptide complex in preventing osteoporosis has been established. Thymus peptides in the complex normalize immune reactions, which are triggered by inflammatory pathologies of the articular system.

- Increases the mineral density of bone tissue;
- Normalises the function of bone tissue;
- Improves metabolism in bone and cartilage tissue;
- Normalises the functions of the musculoskeletal system;
- Stops atrophy of joints, cartilage and bone tissue;
- Normalises the function of blood vessels.

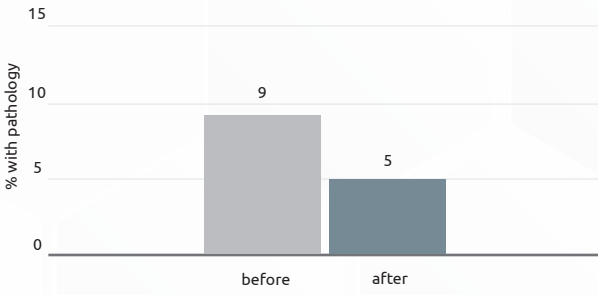


Clinical trials of the OSTEO 3 Plus were conducted on patients with joint osteoarthritis, spinal osteochondrosis and osteoporosis. Intake of OSTEO 3 Plus Peptide Complex by patients with osteoarthritis of



20. Effect of cartilage peptides on joint mobility and lumbar spine pain syndrome.\*

the knee joints contributed to the reduction of pain and increased joint mobility in 68.5% of cases. In patients with osteochondrosis of the spine OSTEO 3 Plus Peptide Complex helped to reduce pain in 53.7% of cases.



21. Application of peptides of a parathyroid gland on subjects with initially lowered index (20-25%) of mineral density of bone tissue (IPCT).\*



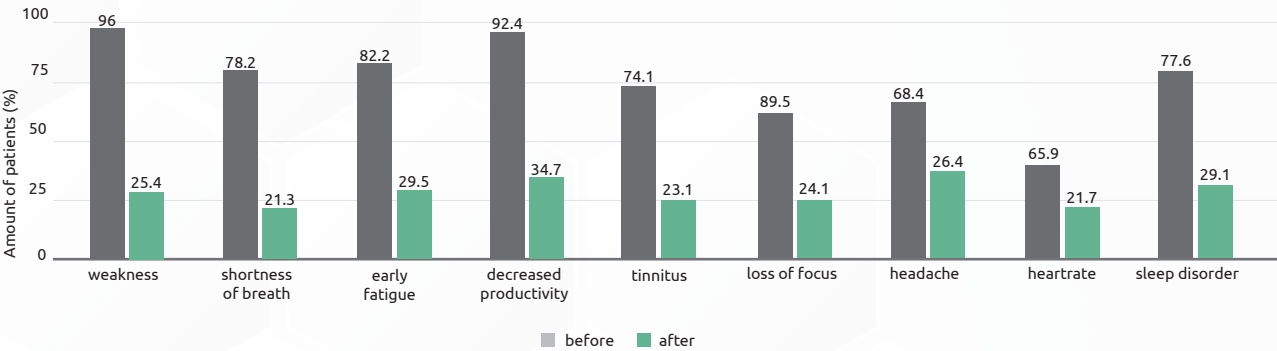
Biologically active food supplement  
Peptide Complex ANEMO 3 Plus

ANEMO 3 Plus normalises the function of the hematopoietic system, and prevents the development of atrophic processes in the tissue of the immune system, bone marrow and blood vessels. Peptides included in the complex reduce the risk of anemia. After a course of the blood vessel polypeptide complex, the subjects noted an improvement in memory, attention and a decrease in emotional lability.

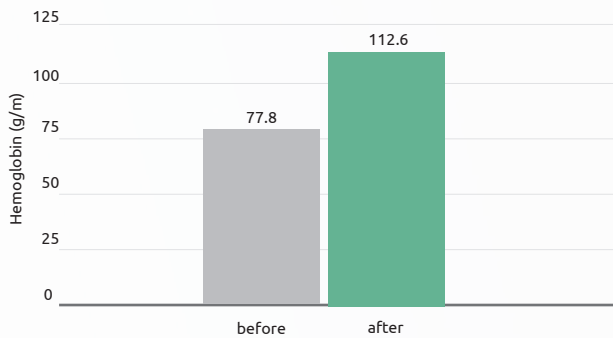
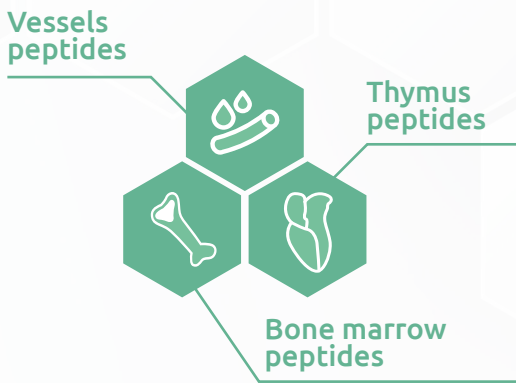
Clinical study of the effectiveness of the ANEMO 3 Peptide Complex plus was performed on women aged 35 to 59 years with signs of mild and moderate iron deficiency anaemia due to malnutrition.

The time it took patients to improve their condition reduced by 24,4% in patients who took Anemo 3 Plus relative to those receiving standard practice.

- Restores the ratio of blood form elements;
- Enriches red blood cells with hemoglobin;
- Improves the immune system;
- Prevents the appearance of increased fatigue;
- Reduces the frequency of headaches;
- Helps to improve sleep.



22. Dynamics of subjective indicators in patients with anemia.



23. Effect of ANEMO 3 Plus peptide complex on hemoglobin content in blood serum of patients with anemia.

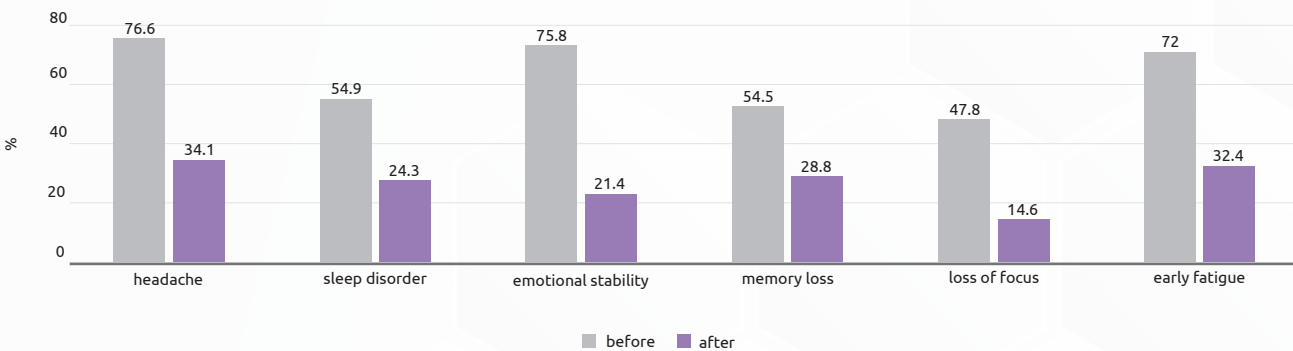
Biologically active food supplement  
Peptide Complex NEURO 3 Plus

NEURO 3 Plus accelerates the restoration of brain function, prevents the development of neurodegenerative processes, reduces the risk of developing pathological conditions of blood vessels and liver. Brain peptides in the complex affect the synthesis of neurotransmitters that regulate such functions as memory, thinking and speech. The emotional state and response to stress factors are improved.

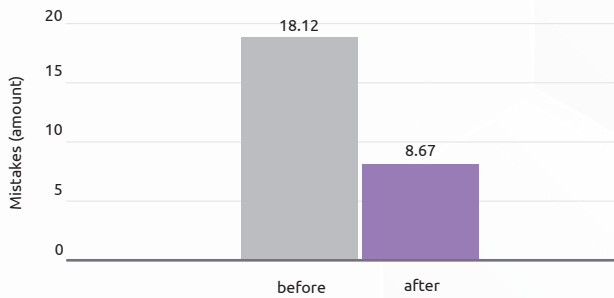
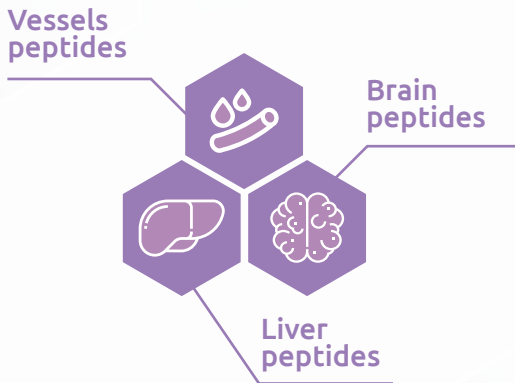
Due to the blood vessel peptides walls of arteries are strengthened, their tone and permeability normalises, which improves blood flow to the brain, prevents the development of hypoxia and severe vascular disorders.

Clinical trials of Neuro 3 Plus peptide complex were conducted on patients with various diseases of the central nervous system: the remote consequences of brain injury, conditions after a stroke, vascular encephalopathy, decreased mental performance, memory, attention. After the application of Neuro 3 Plus the clinical result was good in 64.6% of cases within patients in the main group, satisfactory in 22.9%, absence of positive effect - in 12.5% of cases. Negative effect of Neuri 3 Plus peptide complex on the condition of patients wasn't noted.

- It improves the memory indicators;
- Helps to increase concentration;
- Increases work capacity;
- Normalises cognitive functions;
- Improves the bioelectrical activity of brain neurons;
- Improves integral brain function.



24. The effect of Neuro 3 Plus peptide complex on the subjective health indicators of patients.

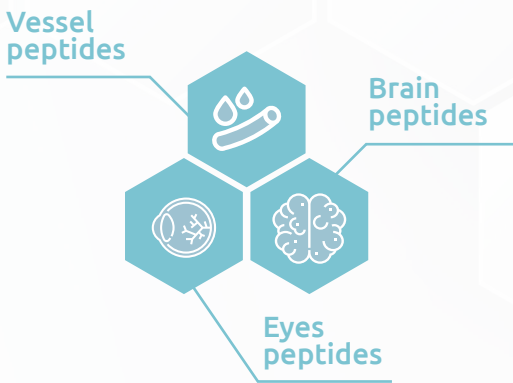


25. Impact of Neuro 3 Plus peptide complex on indicators of dynamics of performance on a proof test amongst patients with central nervous system diseases.

Biologically active food supplement  
Peptide Complex VISION 3 Plus

Normal functioning of the visual organ is mainly related to the optimal interaction within the brain, blood vessels and eye cells. Consumption of VISION 3 Plus normalizes the metabolism of brain neurons, retinas and photoreceptors. Vascular peptides in the complex improve blood flow to the tissue of the retina and brain. Retina peptides accelerate the restoration of visual function in lesions resulting from diseases of various genesis. The complex prevents the development of atrophic processes in retinal tissues.

- It improves vision;
- Slows down dystrophic processes in the retina;
- Normalizes the functions of the visual analyzer;
- Removes accommodation spasm;
- Reduces the risk of cataracts and glaucoma;
- Leads to a decrease in intraocular pressure.



Additional information to the studies  
and graphs shown in the brochure.

Graph 1. The level of melatonin in the blood decreases under the influence of negative external factors and ageing. Polyvitamin complexes are unable to restore balance. Epiphysis peptides stimulate production of endogenous melatonin and allow raising its level to the required values.

Graph 20. Healthy joints have a high degree of mobility, movements are not accompanied by discomfort or unpleasant sensations. With some illnesses, these indicators deteriorate. Taking peptides of the joints improves the sensation of movement not only in the bone joints of the limbs, but also in the spine.

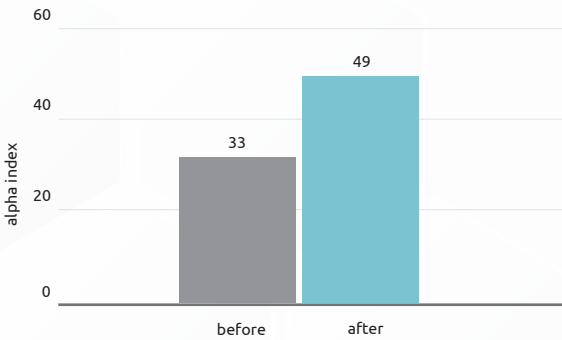
Graph 21. The state of bone mineral density can be judged by the activity of parathyroid glands. Analysis of the data shows that after 3 months of receiving peptides of the parathyroid glands a deficiency in bone mineral density by 20-25% gradually returns to physiological norm.

Graph 26. Perception of illumination degree and color depends on the state of the retina cells. Negative changes in metabolism lead to disturbed production of substances involved in the visual process. Analysis of the use of eye peptides in people with visual problems shows that the combination of standard methods of healing with short peptides can achieve 2-3 an improvement by a factor of 2-3 times.

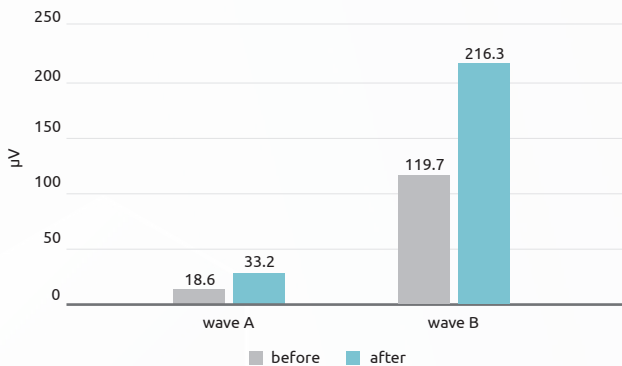
All information contained in this document is provided by Vitual Ltd. solely to the current counterparty of Vitual Ltd. in order to fulfill the obligations of the said counterparty under the contracts/ agreements agreed with Vitual Ltd. is intended for internal use by the employees of the said counterparty for the purposes of its study and verification, and is not an advertisement.

Clinical testing of the VISION 3 Plus peptide complex was conducted on patients with dystrophic diseases of the retina of various etiologies and post-traumatic endothelial epithelial dystrophies of the cornea. As a result of the research carried out it has been established that maximum effectiveness was

achieved by combining common treatment and Vision 3 Plus was observed in patients with initial stages of dystrophic changes in the retina. This showed increased visual acuity and improvement in the electrophysiological indices of the retina, the results of fluorescent angiography and change in visual fields.



26. Evaluation of the influence of brain peptide complex on the bioelectric activity of neurons.\*



27. Influence of VISION 3 Plus peptide complex on electroretinography indices in patients with dystrophic retina diseases.