GARMONIA Ltd.
www.gerontology.ru
ibg@gerontology.ru
+7 (812) 235 18 32
+7 (812) 230 00 49
Beauty products line
YOUTH GEMS cosmetics with peptides and ginseng extract

- DAY CREAM with peptides and ginseng extract
- NIGHT CREAM with peptides and ginseng extract
- EYELID GEL with peptides and ginseng extract
- FACIAL MASK with peptides and ginseng extract
- SERUM with peptides and ginseng extract
- BODY MILK with peptides and ginseng extract
- TONIC with peptides and ginseng extract

PEPTIDES ARE MOLECULES OF BEAUTY AND SUCCESS!
Adverse environmental factors (ecological, climatic, geochronopathogenic, occupational, psycho-emotional) facilitate synthesis of free radicals in skin cells entailing dysfunction in various skin structures and, as a consequence, lead to its premature ageing. Antioxidant activity of substances helps to restore disturbed skin functions and neutralize negative influence of environmental stress factors on the skin to prevent its premature ageing. However an antioxidant effect itself does not solve all the problems related to skin dysfunction. Cosmetic branch development forces scientists to search for more and more progressive solutions aimed at improvement of skin condition, and thereupon special attention of scientists is now turned to peptide bioregulators.

Chemical and biological association of the Russian Academy of Sciences “Firm Vita” together with the Saint-Petersburg Institute of Bioregulation and Gerontology have developed an innovative line of beauty products containing synergic ingredients:

- Target peptides
- Ginseng biomass extract — bioantioxidant complex Neovitin®
Revolutionary YOUTH GEMS cosmetics is a unique innovative set of products based on 35-year long studies conducted at the Saint-Petersburg Institute of Bioregulation and Gerontology in the field of peptide bioregulation.

YOUTH GEMS beauty products activate skin barrier mechanisms and help to prevent formation of new wrinkles and reduce the depth of existing ones.

A unique combination of peptides and ginseng will eraze signs of stress and weariness and make skin smooth, moisturized and radiant.

Experts in aesthetic medicine reported anti-edematous, anti-inflammatory, anti-hematomic and anti-oxidant effect of cosmetics YOUTH GEMS after beauty injections. Home care prolongs the effect obtained.

The luxury of miraculous natural formula makes the product line “YOUTH GEMS cosmetics with peptides and ginseng extract” a choice of the most sophisticated ladies.
DAY CREAM
WITH PEPTIDES AND GINSENG EXTRACT

Ingredients:

Action:
• The cream increases metabolic processes in skin cells, improves its structure due peptides of thymus, vessels, cartilage and pineal gland, as well as bioantioxidant complex Neovitin®

• Antioxidant action of peptides of thymus, vessels, cartilage and pineal gland, as well as that of bioantioxidant complex Neovitin® and argan oil, prevents skin ageing, enhances its resistance to adverse influence of aggressive environmental factors;

• Cartilage peptide, bioantioxidant complex Neovitin® and argan oil contribute to smoothing of small wrinkles and skin softening, and increasing its elasticity;

• The cream intensifies and tones up skin due to the influence of vessels and cartilage peptides, and bioantioxidant complex Neovitin®, which improves skin microcirculation;

• The oils included into the cream composition make the skin soft and velvet again;

• It intensively moisturizes the skin with the help of argan oil, raisin-seed oil and sodium hyaluronate.
NIGHT CREAM
WITH PEPTIDES AND GINSENG EXTRACT

Ingredients:
Aqua, Glycine Soja Oil, Steareth-21, Steareth-2, PPG/PEG-4/14 Dimethicone, Potassium Cetyl Phosphate, Cetearyl Alcohol, Panax Ginseng Cell Culture Extract (Neovitin®), Olea Europaea Fruit Oil, Simmondsia Chinensis Seed Oil, Vitis Vinifera Seed Oil, Paeonia Extract, Stearic Acid, Palmitic Acid, Ethylhexyl Cocoate, Phenoxyethanol, Ethylhexylglycerin, Triethanolamine, Benzisothiazolinone, Methylisothiazolinone, Citric Acid, Butylated Hydroxytoluene, Argania Spinosa Kernel Oil, Bisabolol, Parfum, Thymus, Cartilage, Vessels and Pineal Gland Peptide Complexes, Hexyl Cinnamal, Limonene, Butylphenyl Methylpropional, Linalool

Action:
• Provides intense nutrition of the skin cells due to peptide complexes of thymus, vessels, cartilages, pineal gland, bioantioxidant complex Neovitin® made of ginseng cellular biomass, argan and soya oils;

• Thymus peptide, bioantioxidant complex Neovitin® and jojoba oil being cream ingredients restore natural protective skin barrier;

• Peptides of thymus, vessels, cartilage, pineal gland in combination with bioantioxidant complex Neovitin®, peony extract, argan oil, raisin-seed and jojoba oil stimulate and increase the activity of skin cells, accelerate their regeneration that results in improvement of complexion, reduction of vascular patterns, skin radiance and elasticity;

• Combination of several active ingredients — peptides of thymus, vessels, cartilage and pineal gland, bioantioxidant complex Neovitin®, argan oil, jojoba oil and raisin-seed oil — diminishes negative traces of environmental factors on the skin, contributes to physiological restoration of its basic structural elements and helps to slow down skin ageing.
EYELID GEL
WITH PEPTIDES AND GINSENG EXTRACT

Ingredients:
Aqua, Propylene Glycol, Cyclomethicone, Panax Ginseng Cell Culture Extract (Neovitin®), Xanthan Gum, Chondrus Crispus, Glucose, Glycerin, Hydroxyethyl Acrylate/Sodium Acryloyldimethyl Taurate Copolymer, Sponge Extract, Phenoxyethanol, Ethylhexylglycerin, Saccharomyces Cerevisiae Extract, Argania Spinosa Kernel Oil, Parfum, Thymus, Cartilage, Vessels and Pineal Gland Peptide Complexes, Hexyl Cinnamal, Limonene, Butylphenyl Methylpropional, Linalool

Action:
- Peptides of thymus, vessels, cartilage, pineal gland and bioantioxidant complex Neovitin®, argan oil and yeast extract being ingredients of the gel prevent formation of new wrinkles and black eye-rim, increase skin elasticity, slow down the process of skin ageing;

- Thanks to the action of the peptides of thymus, vessels, cartilage, bioantioxidant complex Neovitin®, extracts of yeast and fresh-water sponge the gel improves microcirculation and lymph drainage, reduces eyelids edema (eliminated “swelled eyes effect”), carefully nourishes, moisturizes and soothes the sensitive skin around eyes;

- Due to thymus peptide, bioantioxidant complex Neovitin® and argan oil in its composition the gel produces anti-inflammatory action, it softens the skin, eliminates irritation, including that caused by decorative cosmetics;

- Moisturizes intensively the skin thanks to specially developed complex (xanthane gum, carageenan, glucose).
FACIAL MASK WITH PEPTIDES AND GINSENG EXTRACT

Ingredients:
Aqua, Cyclomethicone, Panax Ginseng Cell Culture Cake, Panax Ginseng Cell Culture Extract (Neovitin®), Potassium Cetyl Phosphate, Cetearyl Alcohol, Steareth-21, Steareth-2, PPG/PEG-4/14 Dimethicone, Theobroma Cacao Seed Butter, Xanthan Gum, Chondrus Crispus, Glucose, Glycine Soja Oil, Glyceryl Stearate, Caprylic/Capric Triglyceride, Dimethicone, Phenyl Trimethicone, Phenoxyethanol, Ethylhexylglycerin, Benzisothiazolinone, Methylisothiazolinone, Argania Spinosa Kernel Oil, Sodium Hyaluronate, BHT, Parfum, Thymus, Cartilage, Vessels and Pineal Gland Peptide Complexes, Hexyl Cinnamal, Limonene, Butylphenyl Methylpropional, Linalool

Action:
• Cleans skin deeply, eliminates keratinized cells, improves skin microrelief, increases its elasticity, soothes small wrinkles and levels the complexion. Makes the skin look fresh and elastic, inhibits its premature ageing.

• The biocomplex of cellular membranes of the ginseng root softly peels and deeply hydrates the skin, activates the process of cells renewal and improves skin blood microcirculation due to peptide complex of vessels and bioantioxidant complex Neovitin®

• The peptides of thymus and pineal gland in combination with bioantioxidant complex Neovitin® stimulate metabolic processes in skin cells, accelerate its regeneration, protect against premature ageing and negative action of environmental factors, stress included;

• Thymus peptide and cocoa oil restore skin barrier function, nourish, soften and tone it up, make it elastic and smooth thanks to cartilage peptide;

• Peptides of thymus, vessels, cartilages and pineal gland together with bioantioxidant complex Neovitin® and argan oil are unique natural antioxidants which eliminate damaging impact of free radicals and rejuvenate the skin;

• Intensively hydrates the skin with the help of specially developed moisturizing complex (xanthane gum, carageenan, glucose) and sodium hyaluronate with additional softening effect of argan oil.
FACIAL SERUM
WITH PEPTIDES AND GINSENG EXTRACT

Ingredients:
Aqua, Sorbitol, Glycerin, Panax Ginseng Cell Culture Extract (Neovitin®), Xanthan Gum, Chondrus Crispus Extract, Glucose, PEG-40 Hydrogenated Castor Oil, Propylene Glycol, Prunus Amygdalus Dulcis Seed Extract, Phenoxyethanol, Ethylhexylglycerin, Panthenol, Disodium Rutinyl Disulfate, Hydroxyproline, Magnesium Ascorbyl Phosphate, Tocopherol, Ascorbyl Palmitate, Hydroxyethyl Acrylate/Sodium Acryloyldimethyl Taurate Copolymer, Benzoisothiazolinone, Methylisothiazolinone, Argania Spinosa Kernel Oil, Citric Acid, Parfum, Thymus, Cartilage, Vessels and Pineal Gland Peptide Complexes, Hexyl Cinnamal

Action:
• Thanks to the peptides of thymus, vessels, cartilage, pineal gland and bioantioxidant complex Neovitin® in its composition the serum intensifies metabolic processes in skin cells and improves its structure;

• The serum reveals a pronounced anti-inflammatory effect due to targeted action of thymus peptide and bioantioxidant complex Neovitin®;

• Natural antioxidants being ingredients of the serum (peptides of thymus, vessels, cartilages, pineal gland, bioantioxidant complex Neovitin®, vitamin E) neutralize effectively negative traces of free radicals on the skin, inhibiting skin ageing;

• Cartilage peptide contributes to normalization of collagen synthesis by skin cells that leads to smoothing of small wrinkles, improvement of skin microrelief; this result is intensified by the effect of active ingredients of the bioantioxidant complex Neovitin® and formation of elastic smooth film on a skin under the influence of sweet almond extract, creating “face lifting” effect;

• Vessels peptide improves considerably microcirculation in the skin thus optimizing metabolic processes in the vascular wall. This effect is enhanced by bioantioxidant complex Neovitin®; the liposomes with vitamin C and rutin who deliver active ingredients of the serum to deep layers of the skin resulting in improvement of skin nourishing and turgor;

• It intensively moisturizes skin with the help of specially developed complex (xanthane gum, carageenan, glucose) and panthenol, sorbitol and vitamin E, supplemented wiht argan oil.
BODY MILK
WITH PEPTIDES AND GINSENG EXTRACT

Ingredients:

Action:
• Cleans the skin effectively, eliminates skin discharge and old epidermis cells;
• Thymus peptide promotes regeneration of cells, it increases skin elasticity and produces anti-inflammatory effect;
• Raisin-seed and argan oils being ingredients of the milk intensively nourish the skin, improve its protection functions;
• Hydrolipid and acid-alkaline balance of the skin can be restored by peptides of the pineal gland and bioantioxidant complex Neovitin® which activate cells breathing;
• It makes skin elastic and smoothes small wrinkles with the help of cartilage peptide, bioantioxidant complex Neovitin®, argan oil;
• Protects the surface layers of skin against dehydration due to microcirculation improved by the impact of vessel peptide and green tea extract.
FACIAL TONIC
WITH PEPTIDES AND GINSENG EXTRACT

Ingredients:
Aqua, Propylene Glycol, Glycerin, Panax Ginseng Cell Culture Extract (Neovitin®), Hamamelis Virginiana Water, Phenoxyethanol, Ethylhexylglycerin, Panthenol, PEG-75 Meadowfoam Oil, PEG-40 Hydrogenated Castor Oil, Benzisothiazolinone, Methylisothiazolinone, Parfum, Thymus, Cartilage, Vessels and Pineal Gland Peptide Complexes, Hexyl Cinnamal

Action:
• Light tonic with pleasant odour, effectively and carefully cleans and soothes skin of the face, neck and decollete, and removes impurities and make-up without drying the skin;
• It actively moisturizes and renovates the skin, making it bright and radiant, elastic and silky under the effect of panthenol, winterbloom and meadowfoam extracts;
• It produces anti-inflammatory action due to the influence of thymus peptide, bioantioxidant complex Neovitin®, winterbloom extract, and prevents acne;
• It has pronounced rejuvenating effect thanks to the action of thymus peptides, vessel peptides, peptides of cartilage and pineal gland, bioantioxidant complex Neovitin®.
RECOMMENDATIONS FOR COMPLEX APPLICATION:
FACE, NECK, DECOLLETE AND BODY
WITH BEAUTY PRODUCTS
YOUTH GEMS
COSMETICS WITH PEPTIDES AND GINSENG

DAILY HOME CARE FOR ANY TYPE
OF SKIN AND ANY AGE

**Day care:** moisturize the face, neck, decollete with **YOUTH GEMS tonic**, then apply a thin layer of **day YOUTH GEMS cream**. Distribute **YOUTH GEMS eyelid gel** over the skin surface around the eyelids with gentle massage movements.

**Evening care:** After cleansing with **YOUTH GEMS tonic** apply 3–4 drops of **YOUTH GEMS serum** on the face and 2–3 drops — on the neck and decollete, distribute by gentle movements. In 3–4 minutes you can apply **YOUTH GEMS night cream**.

- **2–3 times a week** after cleansing with **YOUTH GEMS tonic** apply thick layer of **YOUTH GEMS mask**; in 10–15 minutes remove the residues of the mask with **YOUTH GEMS tonic**; then apply **YOUTH GEMS night cream**.
- **YOUTH GEMS body milk** with nutritious, moisturizing and tightening effect should be used for moisturizing of the body after shower.

Daily complex employment of all **7 YOUTH GEMS products** will help you easily and **quickly reach visible results**.

Research and practical data obtained testify to a high efficacy and long-term action of **YOUTH GEMS** products which contribute tremendously to improvement of your skin and counteraction to adverse environmental factors, including psycho-emotional stress and various skin-damaging impacts.
CORRECTION OF CONSEQUENCES OF INVASIVE METHODS OF AESTHETIC MEDICINE

Modern aesthetic medicine is a field of high technologies. Various invasive methods of skin correction (laser polishing, aggressive peeling, injection procedures, plastic surgery, etc.) are on the upswing, though they are often accompanied by undesirable side effects, such as edema, hyperemia, hematomas and so forth.

The program of home care with YOUTH GEMS beauty products after the most widespread injection procedures (mesotherapy, biorevitalization, bioreparation, bioreinforcement, wrinkles and lips contour correction, mesothreads, botox, non-surgical liposuction of the face form, plasmolifting, volume modelling etc.) has been developed to reduce rehabilitation period.

**Antiedematous stage** — application of YOUTH GEMS tonic in the form of 10 minute applications.

**Anti-inflammatory, soothing stage** — apply YOUTH GEMS mask as a dense layer. In 10–15 minutes remove the mask with YOUTH GEMS tonic.

These two stages can be used 1–2 times a day for the first week after the procedure. Further the mask can be used 2–3 times a week.

**Restoration, regenerative stage**

**Day care:** moisturize the face, neck, decollete with YOUTH GEMS tonic then apply a thin layer of YOUTH GEMS day cream. Apply YOUTH GEMS eyelid gel to the skin around the eyelids with gentle massage movements.

**Evening care:** after cleansing with YOUTH GEMS tonic apply 3–4 drops of YOUTH GEMS serum on the face and 2–3 drops — to the neck, decollete, distribute with gentle movements. In 3–4 minutes apply YOUTH GEMS night cream.
The beauty product line “YOUTH GEMS cosmetics with peptides and ginseng extract” is a specially developed program of complex skin care for the face, neck, decollete and body.

The cosmetic products of this line include unique active ingredients: short peptides with targeted tissue-specific action to all basic skin structures, ginseng biomass extract with strong antioxidant and anti-inflammatory action and a number of other active ingredients.

**Thymus peptide** — stimulates tissue regeneration, synthesis of tissue-specific proteins, cells proliferative and metabolic activity, accelerating renewal of cells of various tissues; reveals anti-inflammatory effect, accelerates healing of wounds; displays antioxidant, immune stimulating and anti-stress action.

**Pineal gland (epiphysis cerebri) peptide** — regulates metabolic processes and increases protein synthesis in skin cells, it reveals high antioxidant activity, normalizes lipid peroxidation in skin cells that promotes elimination of negative influence on the skin of external (air pollution, intense sunlight, intensive physical activities, traumas) and internal (emotional stress) adverse factors hence facilitates metabolic processes in tissues to accelerate restoration process.

**Cartilaginous tissue peptide** — stimulates regeneration of fibroblasts and keratinocytes, interferes with destructive changes in collagen skin structure, strengthens collagen structure of elastic skin fibers and increases its elasticity.

**Vessel peptide** — regulates metabolic processes in a vascular wall, normalizes vascular tone, restores skin microcirculation disturbed under the effect of adverse environmental factors and emotional stress, strengthens and regulates permeability of skin vessel walls, raises skin turgor.
Bioantioxidant complex Neovitin® is a complex of active ingredients (triterpene glycosides; flavonoids, catechines, anthocyanides; micro- and macroelements) isolated from ginseng biomass cells using original biotechnological method. They participate in oxidation-reduction processes in the skin. Being a highly effective antioxidant, it produces anti-inflammatory and vitamizing effect, strengthens the walls of blood vessels, normalizes fat and protein metabolism in skin cells and optimizes content of micro- and macroelements. It is intended for balance and correction of antioxidant skin status that is very important for prevention of natural and premature ageing of skin, protection against oxidative stress caused by adverse ecological conditions, smoking, and administration of antibiotics, intense physical and emotional loads, staying in air conditioned rooms.

Biocomplex of cellular membranes of ginseng root — is isolated from ginseng biomass cells. These are cellular membranes of ginseng root biomass, structures of the cell periphery, keeping its shape and protecting its protoplast. Main substance is cellulose. Cellulose molecules are long chains, collected in groups — microfibrilles. Besides cellulose the primary cellular membrane contains pectin and structural protein — glycoprotein. Cellular membranes are a soft peeling, which improve skin elasticity and suppleness. It makes the skin soft and silky.

Olive oil — consists mainly of oleic acid triglycerides (up to 84%), the rest are glycerides of palmic and stearin acids, cholesterol and phytosterol, lecithin. It makes skin tender and velvet. Regenerates and moisturizes irritated, exfoliative, dry and withering skin.

Raisin-seed oil — has anti-inflammatory, moisturizing and regenerative effect. Promotes peeling-off of keratinized cells, considerably improves skin tone and structure. Regulates sebaceous glands activity, prevents dilation of pores.

Argan oil — is isolated by pressing of seeds (kernels) of the pips of argan tree fruits using cold pressing method. The argan tree, or iron tree, grows only in Morocco, and argan oil is one of the most rare and expensive vegetable oils in the world. Argan oil contains a lot of vitamin E and vitamin F (nonsaturated fat acids). Argan oil is suitable for any type of skin. It is especially effective for treatment of age-related changes — skin wrinkles, flabbiness, dryness. Oil is quickly absorbed, it gets into deep layers of epidermis, improves derma cells condition, binds free radicals, promotes division of healthy cells. Perfectly moisturizes, nourishes, softens, regenerates skin, making it elastic, supple, healthy and rested again. It improves skin structure. It has proven itself good for gentle skin around the eyes, sensitive and children’s skin care. It helps to prevent occurrence and to eliminate existing stretch marks. It reveals wound-healing, anti-inflammatory, analgesic effect so it can be used for treatment of various skin damages.
Soya oil — is a product of pressing and extraction of crushed soybeans. It is an important source of lecithin. It contains linolic acid, oleine acid, palmitin and stearin acids. As well as all oils rich in irreplaceable fat acids, lecithin and phytosterol, it restores epidermal barrier and water-retaining ability of the skin. Due to tocopherols and phytosterols it has expressed regenerative action.

Sodium hyaluronate — is a derivative of hyaluronic acids. It can normalize water balance. It is well tolerated by the skin. It is used in cosmetic preparations as a gel forming component, but first of all, for elimination of hyaluronic acid deficiency which biological synthesis is disturbed due to ageing.

Jojoba oil — is received from the beans of tropical evergreen bush. The mix of nonsaturated ether fat acids, it possesses high chemical stability and can be used as an additional preservative for cosmetic products. It possesses high penetrating ability and is deeply absorbed by the skin, providing moisturizing, nourishing, regeneration and protection of deep epidermis layers. Jojoba oil has more intense curative properties than many vegetative and animal oils. It promotes moisture preservation in skin tissues, eliminates peeling and irritation, promotes healing of cracks.

Starch — amylose and amylopectine polysaccharides, which monomer is alpha-glucose. The starch synthesized by different plants in their chloroplasts under the influence of light at photosynthesis, improves complexion and skin functions due to blood microcirculation improvement — the skin gets pleasant glossy shine and the complexion becomes much better.

Green tea extract — natural antioxidant with high content of polyphenols, its activity as an antioxidant is several times higher than antioxidant activity of vitamin E. Tea polyphenols also have anti-inflammatory and antibacterial effect, promote penetration of biologically active substances into the skin. Caffeine, being a part of the extract, promotes improvement of blood microcirculation and skin nutrition, reduces edema. Tannins make skin elastic. The extract is rich in essences and vitamins C, K and B groups.

Bisabolol — is an extract from chamomile and lavender essence. It possesses anti-inflammatory and soothing action.

Glycerine — triatomic alcohol, a component of vegetable and animal fats. It absorbs moisture from air and keeps it on the skin, making it soft and elastic.

Peony extract — contains an essence which includes salicylic and benzoic acids, tannins, glycosides, iron, chrome, copper, sodium, potassium and other microelements. It is used in beauty products in order to increase skin turgor, for restoration of epidermis functions.
**Xanthane gum** — polysaccharide of microbiological origin which can be received by hydrocarbon fermentation with the help of Xanthomonas Campestris culture. It is an emulsifier and thickener.

**Cocoa oil** — fat oil contained in cocoa beans (up to 55%). It contains stearin, palmitin, oleic and linoleic acids. It reveals healing and toning up effects due to methylxanthine, caffeine, tannins.

**Carrageenan** — polysaccharide, received from the Irish moss or red seaweed. It can reduce allergic reactions. It is used in cosmetics as softening component, it can be used as gelatinization agent, thickener and emulsifier, softening and emulsifying component, it provides stability of emulsion and suspension.

**Glucose** — grape-sugar, monosaccharide. It is produced by acid and fermentative hydrolysis of starch or cellulose. Significant amount of glucose is contained in grapes, honey, etc. It actively participates in salt-water and carbohydrate metabolism, providing skin cells with energy.

**Active yeast complex** — contributes to prevention of baggy skin below the eyes and blood circulation improvement in the capillaries located directly under the skin. It increases elasticity of skin blood vessels due to vitamin PP presence; it stimulates production of vascular endothelial growth factor. It facilitates blood circulation in the area around the eyes, reduces congestion in vessels and reduces black eye-rims and edema below the eyes, making the areas around the eyes rested.

**Fresh-water sponge extract** — possesses anti-inflammatory, anti-edematous and transdermal (conductive) action that considerably strengthens activity of natural ingredients of the gel. It promotes activation of blood supply of the skin around the eyes, provides excellent resolving and bactericidal influence. It results in local release of biologically active substances autacoids — kinins, histamine, prostaglandine etc. Fresh-water sponge is accompanied by low heating effect and temporary local skin reddening.

**Sorbitol** — hexabasic aliphatic alcohol with sweet taste. It can be found in seaweed, rowanberry juice, starch-containing fruits. It can be used as a moisturizing component. It influences serum texture, making it soft, plastic and velvet.

**Liposomes with rutin sulfate, ascorbil phosphate** — hollow microscopic spheres made of lipid membrane. This membrane contains stable form of vitamin C and rutin which slows down skin ageing process. Liposomes deliver active substances in deep epidermis layers. Rutin has additional anti-inflammatory effect, vitamin C — whitening effect.
**Pantenol (provitamin B5)** — possesses healing, moisturizing and smoothing action.

**Vitamin E** — tocopherols contained in green parts of plants, especially in young sprouts of cereals; vegetable oils (sunflower, corn, peanut, sea buckthorn, soya) are also rich in tocopherols. Vitamin E is a natural antioxidant. It protects skin against various oxidizing changes. It participates in biosynthesis of proteins, cells respiration and in other major processes of cellular metabolism. It protects skin cells against external adverse atmosphere influence.

**Sweet almond extract** — possesses smoothing and modelling action. It forms continuous, elastic and smooth film on the skin, making it elastic just like after “face lifting”.

**Winterbloom distillate** — can be received by steam distillation of fresh leaves and plant sprouts, it has cleansing effect and properties of soft antiseptic. It soothes superficial skin layer, promotes shrinkage of pores, and interferes with inflammation.

**Meadowfoam oil** — contains tocopherols and unique combination of fat acids: saturated fat acids — palmitic, stearic, arachic; monononsaturated fat acids — palmitolic, oleic, gadoleic; polynonsaturated fat acids — linoleic. It possesses strong anti-oxidative effect; it moisturizes skin, making an invisible protective film on the skin surface, interferes with moisture evaporation; improves skin structure, softens and soothes, raises its elasticity.
High efficiency of YOUTH GEMS beauty products is conditioned by the action of its basic active ingredients, each having been deeply studied. It is scientifically proved that action of YOUTH GEMS beauty products can be realized through three various mechanisms:

1. Action of peptides, which normalize and stimulate functional activity of various skin structural elements.

2. Action of antioxidants which prevent formation of free radicals.

3. Action of bioflavonoids which intensify antioxidant action and possess high anti-inflammatory activity.
Research in skin cell culture has shown that addition of thymus peptide to the nutrient medium increased skin cells proliferation by 42%, promoting renewal of skin cells.

Growth of skin cells in a nutrient medium

Growth of skin cells in a nutrient medium with addition of thymus peptide

Research in skin cell culture has shown that addition of thymus peptide to the nutrient medium increased skin cells proliferation by 42%, promoting renewal of skin cells.

ACTION OF PEPTIDES

THYMUS PEPTIDE

Thymus peptide reveals a regenerative effect; it accelerates proliferation of various skin structural elements thus promoting their renewal and making the skin look much younger.

Thymus peptide displays immune stimulating properties which help to restore functions of skin immune elements thus facilitating reduction of inflammation and restoration of skin protection function. It increases resistance of the skin to adverse environmental factors.

VESSELS PEPTIDE

Vessels peptide has a pronounced angioprotective action, improves blood microcirculation and normalizes skin cells nourished due to restoration of metabolism in the vascular wall cells, increased elasticity and permeability of the vascular wall.

It results in improvement of complexion, edema decrease, skin vascular net prevention. The skin looks healthy and radiant.

The results of experimental studies confirm that vessel peptide contributed to restoration of metabolism in vascular wall cells up to normal level in each age group despite negative influence of environmental factors that accelerate skin ageing.
**CARTILAGE PEPTIDE**

Cartilage peptide has targeted action on skin cells, restores biological rhythm of collagen synthesis. *Skin improves elasticity, the amount of wrinkles decreases, face and neck contours become more vivid.*

**PINEAL GLAND PEPTIDE**

Pineal gland peptide possesses high antioxidant activity, reducing negative influence on the skin of free radicals synthetized under influence of environmental stress factors, including psycho-emotional stress. *Stress resistance of skin increases.*

The microphotos of skin surface clearly show considerable reduction of transverse and longitudinal striation as a result of a 2-month application of YOUTH GEMS cream with peptides and ginseng extract. Its effect materialized in smooth skin surface, reduced number of small wrinkles, increased skin elasticity and face contours lifting. The listed effects were noted in 100% of women who have taken part in a voluntary clinical trial.

Pineal gland peptide has been scientifically confirmed to inhibit destructive action of the free radicals synthetized in skin under the influence of harmful environmental factors leading to skin premature ageing. Antioxidant activity of skin cells is decreased under the action of stress factors approximately 2-fold, and pineal gland peptide application restores it practically to a normal physiological level.
Assessment of thermal radiation of the skin of volunteers before application of YOUTH GEMS cream with peptides and ginseng extract.

It has been experimentally confirmed that the antioxidant activity of ginseng biomass extract — bioantioxidant complex Neovitin® is several times higher than that of traditional tincture of a wild-growing ginseng root.

- It has a strongly pronounced antioxidant activity, it reduces signs of inflammation reactions and protects skin cells against the influence of free radicals and lipoperoxides, formed as a result of damaged lipid membranes. The lipid structures of skin become protected reliably.

- It facilitates skin cell regeneration, promotes smoothing of existing wrinkles and inhibits occurrence of new ones.

- It improves skin blood microcirculation and reduces edema. 90% of 45 volunteered women aged from 25 to 68 years who applied YOUTH GEMS eyelids gel reported the improvement in skin around the eyes, decreased edema, and smoothed small wrinkles around the eyes.

* p <0.05 as compared to the parameter before cream application.

Assessment of thermal radiation of the skin of volunteers before application of YOUTH GEMS cream with peptides and ginseng extract.
It is known that skin elasticity depends on microcirculation level in tissues and their moisture capacity. The conducted studies of skin microcirculation using thermal imaging method have found reliable variation in thermal radiation parameters between the control skin site and investigated site after application of YOUTH GEMS cream with peptides and ginseng extract within 7 days: the difference has made 6.0% from the control parameter that is a sign of improvement of blood flow level under the influence of the cream.

Average skin impedance parameter in 25 volunteers at the age from 34 up to 67 years before application of YOUTH GEMS cream was within the limits 251.68 ± 6.0 Ohms; after the cream application — 197.31 ± 4.51 Ohms (p < 0.05), i.e. skin impedance in volunteers has decreased and has made 78.4% in comparison to the initial level. Thus, in 5 days of daily use of YOUTH GEMS cream with peptides and ginseng extract skin moisture content has increased by 21.6%, so the cream possesses good moisturizing action.

Clinical trial evidence that YOUTH GEMS creams promote improvement in skin turgor, restore and maintain skin elasticity, including areas around the eyes. This effect is related to enhanced blood flow level and increased skin moisture.
The study of anti-edematous action of YOUTH GEMS cream has shown that the average parameter of skin impedance in 20 volunteers on the intact site made $218.16 \pm 8.31$ Ohms; on a site damaged right after trauma — $125.78 \pm 12.09$ Ohms. Thus, the increase in moisture content in the damaged tissues was reliable and made 42.35% as compared to control (intact site of the skin). After application of YOUTH GEMS cream this index decreased reliably and in 48 hours after cream application was reliably similar to the control, i. e. before damage. It points out to a pronounced anti-edematous action of YOUTH GEMS cream containing peptides and ginseng extract.

Clinical trial of YOUTH GEMS cream with peptides and ginseng extract has shown its high efficiency in restoration of antioxidant system in women aged 25–40 years who were exposed to invasive cosmetic procedures, mesotherapy included.
Mesotherapy is known to lead to intensified lipid peroxidation (LP) and to notable decrease in the general antioxidant activity and the activity of blood antioxidant enzymes. A week after intraskin injections women of control group aged 25–40 years (who did not use YOUTH GEMS cream) experienced increase in lipid peroxidation by 24,75% accompanied by decreased general blood antioxidant activity by 13,2%, activity of superoxide dismutase by 35,5% and activity of hydroperoxides by 20,6%. These changes remained even in two weeks after the end of the course of mesotherapy, and only in 1 month after the injury the investigated parameters came back to normal.

The women of the same age who used YOUTH GEMS cream revealed faster restoration of initial balance between the intensity of lipid peroxidation and activity of antioxidant protection system. In 7 days after the completion of intraskin injections the parameters of lipid peroxidation, general antioxidant activity, activity of superoxide dismutase and hydroperoxides did not differ reliably from the initial parameters.

* p < 0,05 as compared to initial indices

The role of YOUTH GEMS cream on antioxidant protection activity in women aged 25–40 years exposed mesotherapy.
Influence of YOUTH GEMS cream on antioxidant protection activity in women over 55 years old exposed to mesotherapy.

Different dynamics of studied indices of free-radical oxidations was noted in persons of senior age group. The women of control group aged 55 years and older (who did not apply YOUTH GEMS cream) showed more intensive changes in free radical oxidation following mesotherapy as compared to women at the age of 25-40 years, and their indices did not restore to normal values throughout the period of observation (30 days). Application of YOUTH GEMS cream revealed the tendency towards normalization of the antioxidant systems indices already in 14 days after the completion of mesotherapy course, and in 30 days the lipid peroxidation indices, parameters of the general antioxidant system, superoxide dismutase and hydroperoxides activity in women of the senior age group have met the reference values. Thus application of YOUTH GEMS cream promotes complete recovery of the oxidation homeostasis disturbed by the mesotherapy in women of the senior age group.

The results obtained testify that the changes in oxidation homeostasis occurring under the influence of damaging external factors (including mesotherapy and others invasive effects) to the skin have systemic character. According to clinical trials mesotherapy intensified lipid peroxidation and deteriorated skin indices and organism antioxidant systems in general. However, at younger age skin reparative abilities appeared sufficient to normalize antioxidation status within a month after damaging influence. The women aged over 55 years did not reveal normalization of antioxidant indices within a month. It speaks for organism decreased adaptation potential demand for remedies to enhance human vital resource.
One of the most probable mechanisms of positive influence of YOUTH GEMS cream in cases of mesotherapy and other skin damaging factors is the ability of peptides and ginseng biomass extract to stimulate regenerative activity of cells in ageing skin due to intensified cell breathing and accelerated renewal of cells.

Experimental and clinical studies manifested tissue-specific action of the peptides on vascular wall, immune, neuroendocrine, connective tissue skin cells, and pronounced antioxidant properties of ginseng biomass extract as well as anti-inflammatory, regenerative and anti-edematous action. These properties underlie their efficiency in correction of age-related skin changes, including those induced by adverse factors, mesotherapy and other invasive treatments.
cosmetics with peptides
and ginseng extract

GARMONIA Ltd.
www.gerontology.ru
ibg@gerontology.ru
+7 (812) 235 18 32
+7 (812) 230 00 49