

Dietary food supplement

 **Betulafarm**
Синтезировано природой

BETULIN SLIM CORRECT

(Betulafarm®)

USERS'

Scope of application

It is recommended as dietary food supplement — a source of betulin.

Composition

Microcrystalline cellulose – 160 mg, birch betulin (birch bark extract) – 40 mg.

Capsule shell composition – gelatin, titanium dioxide, ferric oxide.

Directions for use – for adults: take 1 capsule per day with food for adults for 3-4 weeks. Repeat the course, if necessary. Consult your doctor before use.

Contraindications

Idiosyncratic reaction to product ingredients, pregnancy, breast-feeding.

Size

200 mg capsules.

Shelf life: 2 years from the date of manufacture.

Storage conditions: store in dry place; keep out of reach of children; don't store above +25 °C.

TS 9197-005-74779358-15

EAC

It is not a drug product.

Certificate of State Registration

RU.77.99.88.003.E.006197.05.15 dd. May 06, 2015

“Betulin Slim Correct” should be sold through specialized stores or pharmacy chain shops.

Manufacturer

Vitamer LTD., Office III, 129110, 1 Orlovo-Davydovskiy Lane, Moscow

Production address: 11 Sovkhoznaya Street, Petushki, Vladimir Region

By order of Betulafarm LTD.,
5 Lev Tolstoy Street, St. Petersburg

Claims to be sent to the authorized organization below:
BetulaFarm LTD., 5 Lev Tolstoy Street, St. Petersburg
Phone: 8 800 100 1738.

ADDITIONAL INFORMATION

Detailed information — on the company's web-site: www.betulin.com

INSTRUCTION

FIELD OF APPLICATION

It is recommended as a dietary food supplement — a source of betulin, inulin, indispensable amino acids, microelements, pectin, ascorbic acid. Betulin and the topinambour concentrate can be prescribed as a powerful prophylactic complex for the overweight reduction.

The unique combination of betulin and topinambour concentrate enables to normalize the basal metabolism processes in the body and as a result, to cope with the excess accumulation of body weight. And antihyperglycemic properties of topinambour make the complex indispensable to life in the prophylaxis and auxiliary treatment of diabetes mellitus of the 1st and 2nd types.

Betulin (lup-20(29)-ene-3 β , 28-diol) is widespread, natural compound from the triterpenes group produced from birch bark.

Betulin is white color powder, odorless, with weak astringent taste. It is oxygen- and sunlight-resistant, non-toxic. Water-insoluble. It is very soluble in organic solvents. High melting temperature of betulin (240-260 °C), stable chemical formula and inert properties of the molecule provide extended storage period without changing properties.

Adipositas action of betulin:

An article of scientists in the “Cell Metabolism” journal dd. 01.2011 caused the roaring interest to a well known and seemingly to the well studied product — betulin.

A dream of the humanity “How to lose weight lying on a sofa!” comes true. An unexpectedness of this discovery is that the availability of betulin in the body changes the mechanism of fat digestion by liver, which results in the cholesterol decline in blood, and accordingly the amount of atherosclerotic plaques in vessels, as well as helps to prevent adipositis and increases the sensitivity to insulin.

According to opinion of scientists, betulin interacts with proteins, which bind SREBPs (sterol regulatory element-binding proteins) by transcription factors, which, as it is generally known, are important for activating expression of genes engaged in the biosynthesis of cholesterol, fat acids and triglycerides. Scientists confirmed by studies on cells that betulin lowered the activity of usually activated SREBPs genes, as well as the level of lipids.

Comparative study was carried out on three groups of people, who were on a diet with high content of fats — on so-called “western diet”. For six weeks the first group got betulin, the second group – lovastatin, well-known statin, which lowers cholesterol, and the third group – placebo. In comparison with placebo, both preparations resulted in the decline of gaining weight, even if by different ways. Betulin compelled to burn more calories, while lovastatin rather diminished the amount of lipids digested from food. It was demonstrated in the study that betulin lowered the level of lipids in liver and adipose tissue to a greater extent than lovastatin. It also improved the sensitivity to insulin by affecting synthesis of fat acids and triglycerides.

Professor of chemistry Robert Karlson from the University of Minnesota, one of pioneers in research of betulin, says: "There is one reason why we think about betulin as a first-class thing – it helps. It helps too well, because it has been synthesized by nature, but not in a laboratory".

The topinambour concentrate (extract) is a powder of yellow-brown color of specific sweetish taste. Organic acids presented not only by dicarboxylic and tricarboxylic acids (malic, fumaric, citric, succinic) of the Krebs cycle, but also by polyhydroxy acids of the primary oxidation of sugars, provide a specificity to taste qualities of the product. Powders are hygroscopic on keeping in an open-top container. Decoctions or water tinctures have dark brown color.



The topinambour concentrate contains only the components of natural origin in native form. It contains carbohydrate complex components, proteins, vegetable oils, macro- and microelements, pectin substances, organic polyhydroxy acids and vitamins.

Water 7-14 %

Cellulose up to 7 %

Polysaccharides

(natural complex of inulin nature) up to 90 %

Proteins up to 7 %

Vegetable fats up to 0.5 %

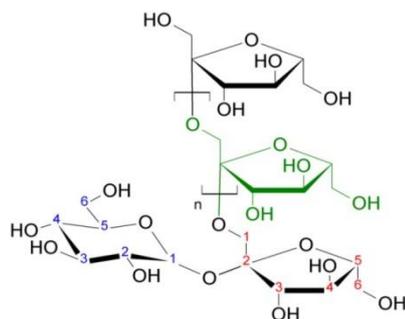
Ash residue up to 3 %

Mineral elements: silicon — up to 0.8 %; iron — up to 12 mg%, magnesium — up to 300 mg%, potassium — up to 2000 mg%, calcium — up to 40 mg%, zinc — up to 15 mg%, copper — up to 0.4 mg%, nickel — up to 0.3 mg%, manganese — up to 40 mg%, phosphorus — up to 500 mg%.

The protein composition of the product is characterized by the variety of constituent amino acids, including indispensable to life, which are synthesized only by plants and are not synthesized in the human body: arginine, valine, histidine, isoleucine, leucine, lysine, methionine, threonine, tryptophane and phenylalanine.

The product content is rich in vitamins of B, B, C.₁₂

Inulin is the main bioactive compound in the topinambour extract.



Inulin, (C H O)_n is an organic substance from the group _{6,10,5} polysaccharides, polymer D-fructose.

Inulin is a polyfructosan, which can be produced in the form of amorphous powder and in the form of crystals, readily soluble in hot water and sparingly soluble in cold water. Its molecular weight

is 5000-6000, it has sweet taste. It forms D-fructose and small amount of glucose during hydrolysis under the action of acids and inulase enzyme. Inulin, as well as intermediate products of its zymolysis, are inulides; it does not have reducing properties. The inulin molecule is a chain of 30-35 fructose residuals in the furanose form.

Biological properties of topinambour concentrate: topinambour as a reducing aid is an excellent drug. Its ability to reduce the body weight when fighting with an overweight was proved in clinical and experimental studies.

Topinambour results in the improvement of adipose and carbohydrate exchange, it reduces the insulin level in blood and diminishes the body weight. It is possible to get a good result while resolving the weight loss matter just within the first month of the use of topinambour in food.

The speed of the product action depends in many respects on individual features of the human body of every separate person. When topinambour is included in the daily ration, it is possible to obtain positive changes in treatment of many severe diseases, which are related to overweight: arterial pressure goes down, performance of the cardiovascular system gets better and exacerbations of cholecystitis and pancreatitis are prevented.

The use of topinambour for weight loss enables to obtain only such body weight reduction, which has been conditioned by a disorder of binding insulin with cellular wall, because this root crop improves the sensitivity of cells to this hormone. The topinambour caloric value for weight loss is small, just 61 kcal. Topinambour has the following useful properties for weight loss: it possesses antihyperglycemic ability, it is used for treatment of diabetes mellitus; it possesses antioxidant properties and removes toxins and heavy metal salts from the body. Topinambour is an excellent source of vitamins and microelements; it promotes the weight loss, it is used in cosmetology, because it successfully smoothes out even deep wrinkles.

The regular use of powder normalizes the sugar level of blood, restores the microflora of bowels, normalizes the cholesterol level, removes toxins and radionuclides from the body, improves metabolism, reinforces the immune system, as well as stimulates the regeneration. The above-listed unique medical properties have been confirmed by clinical tests. The universal principle of action of the topinambour powder lies in the fact that it adsorbs toxins from the body and the longer the powder is used, the deeper layers of the body are released from harmful accumulations. If bowels are cleaned at the first stage of the powder taking, then within several subsequent months the body clears itself at the cellular level. The cell released from toxins restores its initial functions.

The unique microelement and amino acid composition of the topinambour powder provides the body with substances required for the active cell regeneration. A topinambour property to provide not only the health, but also longevity is well known in the folk medicine. Inulin of topinambour is the nourishing environment for the useful microflora of bowels. When the topinambour powder is used regularly, the useful microflora is restored and the body assimilates the required nutrients from the food effectively. As a result metabolism becomes more active and the satiation feeling occurs quicker.

The curative action of the topinambour powder is conditioned by the high content of polysaccharides of the inulin nature, by the presence of pectines, vitamins of the group B, vitamin C, key microelements (silicon, iron, magnesium, potassium, calcium, zinc, copper, manganese, nickel, phosphorus etc.) being in the biogenic state, i.e.

in the best state for digestion. The powder also consists of the most important and indispensable to life amino acids.

INDICATIONS AND USAGE

Betulin together with the topinambour extract can be prescribed as a powerful prophylactic complex for the overweight reduction.

The unique combination of betulin and topinambour concentrate enables to normalize the basal metabolism processes in the body and as a result, to cope with the excess accumulation of body weight. And antihyperglycemic properties of topinambour make the complex indispensable to life in the prophylaxis and auxiliary treatment of diabetes mellitus of the 1st and 2nd types.

BIBLIOGRAPHY

1. Artemova A. Macrobiotic topinambour. St. Petersburg: Publ. house "DILYA", 2003. —128 p.
2. Belousova A. L. Study of topinambour herb and creation of medicinal preparations on its basis. 15.00.02.— Pharmaceutical chemistry, pharmacognosy. Author's abstract of doctoral dissertation. Pyatigorsk, 2004.
3. Phytoogenous bioactive matters: in 3 vol. / B. N. Golovkin et al.; editor-in-chief V. F. Semikhov. M.: Science, 2001. vol. 1. — 350 p.
4. Golubev V. I. Topinambour. Composition, properties, processing methods, fields of application / V. I. Golubev, I. V. Volkova, Kh. M. Kushanov. Astrakhan: Publ.-polygraphic complex "Volga", 1995. — 81 p.
5. Guly I. S. Topinambour and its usage / I. S. Guly, Ya. D. Bobrovnik, N. S. Efremov, N. M. Pasko // Food industry. Scientific and production digest.-Kiev Urozhai, 1987. — No. 1. — p. 40-42.
6. Ekutech R. I. The use of the carbohydrate complex of topinambour tubers being kept in soil / R. I. Ekutech, R. I. Shazzo, G. A. Kupin et al. // Bulletin of the Russian Academy of Agricultural Sciences. — 2009. — No. 5. — P.81-83.
7. Ekutech R. I. Technological aspects of production of inulin containing concentrate from underground topinambour biomass / R. I. Ekutech, R. I. Shazzo, V. V. Kondratenko, G. A. Kupin, R. S. Shazzo // Report to the Russian Academy of Agricultural Sciences. — 2010. — No. 2. — P. 49-5.
8. Ekutech R. I. Topinambour culture of XXI century / R. I. Ekutech, G. A. Kupin, V. V. Kondratenko, M. V. Lukyanenko // Complex usage of biological resources: low-waste technologies, Krasnodar, KIRSPAP. — 2010. — P. 129-133.
9. Zelenkov V. N. Mineral and chemical composition of different parts of topinambour crop / V. N. Zelenkov, I. R. Shelpakova, N. P. Zaksas // Innovative technologies and products: collection of scientific papers. Novosibirsk: Aris, 1999. — Issue 3. — P. 58-62.
10. Kochnev N. K. Topinambour is a bioenergetic crop of XXI century / N. K. Kochnev, M. V. Kalinicheva — M.: Aris, 2002. — 75 p.
11. Kuznetsova M. A. Medicinal herbal raw material and preparations. M., 1987.
12. Pasiko N. M. Helianthus tuberosus L. Morphology, classification, biology, feedstock for selection: dissertation of Doctor of Agriculture / All-Union Research Institute of Plant Breeding. Leningrad, 1989. — 454 p.
13. Pokrovskiy A. G., Plyasunova O. A., Illicheva T. N., Borisova O. A., Fedjuk N. V., Shintyapina A. B., Shults E. E., Petrenko N. I., Uzenkova N. V., Tolstikov G. A., Vasilenko Yu. K., Semenchenko V. F., Frolova I. M. et al. Pharmacological properties of birch bark triterpenoids // Experimental and clinical pharmacology. 1993. Vol. 56. No. 4. P. 53–55.
14. Pronchenko G. E. Pharmaceutical vegetable agents. M., 2002.
15. Reshetnik I. A. Medical and dietary properties of topinambour / L. A. Reshetnik, N. K. Kochnev. Irkutsk: Biotek LLP, 1997. — 58 p.
16. Reshetnik L. A. Topinambour in the food of children of ecologically unfavorable territories / L. A. Reshetnik, N. K. Kochnev // Food and health: dietary food supplement: brief outline report to the 2nd international symposium. M., 1996. — P.17-18.
17. Reshetnik L. A. Raw topinambour tubers as effective enterosorbent / L. A. Reshetnik // "Vegetable resources for the population health": Materials of the 1st Intern. scien.-pract. conf. Sept. 23-27, 2002 — M.; Sergiev Posad, 2002. - P. 390-393.
18. Sokolov S. Ya. Phytotherapy and phytopharmacology / S. Ya. Sokolov. — M.: Medical information agency, 2000. 976 p.
19. Strelkov S. M. Accumulation of carbohydrates in Helianthus tuberosus L. topinambour tubers at vegetative development of the plant / S. M. Strelkov // Biochemistry. — 1961. — Issue 26. No. 4, — P. 569-574.
20. Turishchev S. N. Rational phytotherapy. M., 2000.
21. Pharmacological properties of birch bark triterpenoids / Yu. K. Vasilenko, V. F. Semenchenko, L. M. Frolova, G. E. Konopleva, E. P. Parfentjeva, I. V. Skulte // Experimental and clinical pharmacology. — 1992. Vol. 56, No. 4. — P. 53-55.
22. Phytotherapy with clinical pharmacology basis / Editor-in-chief Kukis V. G. — M.: Medicine, 1999.
23. Chernyaeva G. N. Extractive matters of birch / G. N. Chernyaeva, S. Ya. Dolgodvorova, S. M. Bondarenko. Krasnoyarsk, 1986. — 125 p.

This is a true and accurate translation of the source document.

Duly authorized signatory

Natalya Yu. Gashkova