



PRODUCT DOCUMENTATION

# B!OMULTIvitamin





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# Text of the leaflet

Blomultivitamin is a bio-information product containing extracts from plants and fruit rich in natural vitamins, minerals, and biologically active substances. It harmonises in particular the energy pathways of the heart, pericardium, lungs, small intestine and large intestine, furthermore the pathway of the stomach, spleen, and pancreas, urinary bladder, liver, gall bladder, and the triple energizer.

## Use:

Blomultivitamin provides the body with an optimum amount of vitamins in their natural form, it generally tones the body, refreshes the organism and supports the immune system. It increases one's resistance to stress, viral and bacterial diseases, and neutralises the negative impact of polluted environment. It improves mental health, reinstates harmony, and significantly prevents fatigue and exhaustion. Due to its high content of antioxidants it slows down the aging process in the body. It enhances digestion, protects gastrointestinal mucosa and maintains good condition of the intestines. It protects the heart and vessels and acts as prevention against cardiovascular and other civilisation diseases.

## Further use:

> For people with poor diet, change of dietary habits, during dietary cures and vegan diet (complete elimination of animal proteins), aversion to fish products

- > When the intestines are under strain due to the use of antibiotics, hormonal contraception, during intestine disorders
- > For people with exhausting lifestyle – stress, alcohol, smoking, coffee
- > For excessive mental, physical, and sports stress
- > For the support of adequate function of the nervous system
- > To maintain good condition of the skin and mucosa
- > For people with peptic and duodenal ulcers
- > For the support of red blood cell formation (in anaemia)
- > To improve physical as well as mental functions of the elderly and as a support during recovery
- > To maintain good condition of bones and teeth and as prevention of osteoporosis
- > For patients with acute or chronic infections (viruses, bacteria, fungi)

## Composition:

### Sea buckthorn (C, A, E, B, K, choline)

It contains a large amount of vitamins; it supports immunity and slows down the process of aging. It increases resistance during infectious conditions, and accelerates the process of healing. It improves the condition of connective tissue and skin, stimulates digestion, and protects the heart and circulatory system. It also acts as a prevention of cervical cancer.

### Aloe Vera (A, C, B)

It cleans the body, acts as an anti-inflammatory

agent, and stimulates immunity. It has positive effects on the skin, improves the function of the digestive system, and protects the heart and vessels. It acts preventively against intestinal cancers.

#### **Pomegranate (C, B, A)**

It removes free radicals from the body and acts as an anti-inflammatory agent. It reduces acidity of the stomach content and stimulates digestion. It acts preventively against prostatic cancers.

#### **Royal Jelly (full range of vitamins)**

It improves the overall condition and resistance to infections. It reinstates good humour and harmonises the mental condition. It enhances liver regeneration and the production of red blood cells. It stimulates healing, improves skin condition as well as the condition of all connective tissues.

#### **Magnolia Vine, Schisandra (C, E)**

It generally enhances the resistance of organism to infections, fatigue or stress (adaptogen). It supports the function of the nervous system and helps to improve mental health. It reduces the risk of civilisation diseases, improves digestion, protects the heart and vessels, and helps during respiratory diseases.

#### **Japanese quince (C, A, B)**

It has anti-inflammatory effects, protects gastrointestinal lining, and is effective against spasms.

Bio-information means frequencies which simulate the control frequencies in those subcortex centres of the brain that regulate the vegetative nervous system and the function of viscera. They offset negative information and initiate the retrograde regenerative process.

	Vitamins	In Blomultivitamin	% RDA
C	Ascorbic acid	60 mg	100
A	Retinol	0,8 mg	80
D	Calcipherol	10 µg	100
E	Tocopherol	25 mg	250
B1	Thiamine	0,9 mg	30
B2	Riboflavin	0,95 mg	60
B6	Pyridoxine	2mg	100
B12	Cobalamine	2 µg	100
B9	Folic acid	0,2 mg	100
B3	Niacin	2 mg	13
B5	Panthenic acid	8 mg	130
H	Biotin	40 µg	100
	Choline	2 mg	0,4

RDA = Recommended Daily Allowance

Vitamin contents may slightly vary due to the natural character of their sources!

#### **Dosage:**

1 capsule once a day, ideally after meal

# Text of the leaflet

## **Warning:**

Do not exceed recommended daily dose!

Minimum shelf life: see date on the packaging.

Store at 10 – 25°C in a dry place away from sunlight.

Not intended for persons with hypersensitivity to bee and soy products. Not suitable for children, pregnant and lactating women! Nutritional supplements are not intended to substitute varied diet.

## 1. Why we need vitamins?

The word “vitamin” literally means a “vital amine”, derived from the first isolated vitamin– thiamine B1, which is chemically an amine, a molecule containing bound nitrogen. The term vitamin has been maintained despite the fact that it soon became clear that most of the other substances classified as vitamins were not chemically amines. These are substances of great chemical variety, typically with small-size molecules, and their trace amounts are essential for the flawless functioning of the body.

Vitamins are vital ingredients in the human diet. Most of them are classified as so called “essential” substances, which cannot be produced by the human body, and therefore it is necessary to ingest them in food in the form of vitamins or provitamins (beta-carotene is a provitamin of vitamin A). Vitamins K and H are exceptions, these are produced in the large intestine by the activity of intestine micro-organisms, and so is vitamin D which is partly synthesised by the skin exposed to UV radiation.

### **Bio-catalysers, co-enzymes**

In the human body, vitamins play the role of biochemical reaction catalysts which significantly partake in flawless metabolic processes in the body. From the biochemical point of view, some vitamins (particularly vitamin C and vitamin B group) are an

essential part of enzymes and without their supplies enzymatic synthesis is not possible at all. In a long-term vitamin deficiency the fragile enzymatic balance is hence broken (enzymes usually work in a chain and in their activities they follow up on each other), diseases follow, and, in extreme cases, death occurs.

The human body involves a huge number of enzymes (thousands of them) and their number keeps increasing as new molecules are discovered. They are responsible for a wide range of biochemical activities in the body - they are involved in the metabolism of proteins, fats as well as carbohydrates, in cell respiration, blood coagulation, and blood clot dissolution. They are responsible for digestion, they release energy from energy-rich bounds, they participate in the elimination, synthesis and metabolism of substances, and they restore and protect health and essentially maintain life.

Each protein molecule must contain a non-protein part, called co-enzyme or co-factor, where applicable. A co-enzyme is usually the term used for a vitamin molecule, while co-factor is an ion of a trace element (a mineral). It is the co-enzymes that the body cannot produce, and because they are used up in enzymatic activities, it is necessary to ensure their constant re-supply through food. Co-enzymes, moreover, protect the protein molecule of the enzyme from thermal degradation and help to better distinguish and bind specific substrate. Without co-enzymes –

# Introduction to the topic

vitamins a chaos would break out in the body. Vitamins enhance health, protect the body from diseases and slow down the process of aging.

## **Ideal source of vitamins**

In nature, vitamins are produced during metabolism in plants. They are naturally present also in animal organisms, especially in the liver, where some of the vitamins are stored. Yet the concentration of vitamins in animal food products strongly fluctuates, and depends on the quality of animal feeding and subsequent processing of the animal product. Due to heat and chemical treatment much of the vitamins get lost. But the content of vitamins fluctuates also in vegetable produce. The reduction of vitamin content in crops is caused by over-cultivation of plants, fertilisation, soil and water pollution, and unsuitable climate. Careless processing and storage further depletes the vitamin content. The drop in the level of vitamins in food and their utility in the body is dramatically affected by the use of microwave ovens! Vitamin insufficiency in the body may paradoxically occur also when eating only raw vegetables and fruit (e.g. in extreme dieting) which the body cannot fully digest and utilise, and most of the present vitamins are excreted together with the indigestible pulp.

Ideally, vitamins should be supplied in food from organically grown plants with a guarantee that the plants have not been in contact with chemical substances (fertilisers, insecticides, etc.). It is not

necessary to supplement vitamins when eating varied and quality food. If, however, a disease develops or in increased physical or mental activity, or during recovery the intake of vitamins has to be increased immediately.

## **Avitaminosis – complete vitamin depletion**

A depletion of a vitamin can occur either due to its insufficient intake (monotonous, biologically poor, chemically treated diet) or its excessive requirement. An excessive vitamin requirement may arise either due to one's lifestyle (smoking, alcoholism, stress, etc.) or due to a disease, as in any disease the enzymatic activity in which vitamins are essential increases. Another reason of avitaminosis may be an insufficient absorption of the vitamin in the intestine due to poor intestinal microflora (inadequate monothematic diet, use of antibiotics or hormonal contraception), due to intestinal disorders or the administration of certain medicines.

## **Hypovitaminosis – partial vitamin deficiency**

Vitamin insufficiency in the body which is demonstrated by functional disorders of the organism (see below).

The causes are identical to those of avitaminosis. Hypovitaminosis may occur fairly easily due to poor diet. Particularly jeopardised are those individuals whose diet consists of fast-food meals and exclusively of chemically treated meals.

### **Hypervitaminosis – excess of vitamins in the body**

If a vitamin is supplied in excessive quantities, it may also cause health problems. A significantly higher risk is present in vitamins soluble in fats, as these accumulate in the body. Hypervitaminosis occurs very rarely, when diet is monotonous or after excessive use of unsuitable multivitamin products. Hypervitaminosis is usually reversible and resolves quickly once its cause is eliminated.

#### **Vitamins soluble in fats (lipophilic) A, D, E, K**



These are accumulated and stored in the body (usually in the liver). For their utilisation in the body it is necessary to add fats (oil) to the diet.

#### **Vitamins soluble in water (hydrophilic) C, B1, B2, B6, B12, B3, B5, B9, H**



These do not accumulate in the body, their excess is immediately excreted in urine, and they have to be supplied regularly. The exception is vitamin B12, which is stored in the liver.

### **Benefits of using Blomultivitamin**

Blomultivitamin does not contain any synthetically manufactured vitamins, but plant and fruit extracts proper, which are rich in vitamins. The combination of vitamins and biologically active substances naturally associated with them is of great benefit. The present minerals, flavonoids, and organic acids which are extracted together with the vitamins, improve and enhance the effects of Blomultivitamin as well as its utility in the body. Blomultivitamin stimulates immunity and reduces the risk of development of civilisation and infectious diseases.

## **2. Effects of individual vitamins – description**

### **Vitamin C (ascorbic acid)**



Most animals are able to produce vitamin C themselves by biological alteration of the glucose molecule. Humans and guinea pigs are the exception. Vitamin C is not considered a proper vitamin, as its need compared to other vitamins is many times higher, but opinions regarding the recommended daily allowance differ greatly. In long-term use of high doses of vitamin C a vitamin C deficiency may paradoxically occur, as the active transport of vitamin C to the cell is limited in mega-doses.

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## Effects:

- > It enables the production of collagen, a protein macromolecule which is the base of any connective structure. It enhances the strength and elasticity of the vessel wall, bones, and the strength of teeth. It is vital for the very formation of muscles, bones, teeth, and cartilages. It prevents bleeding from the gums and bruising. It enhances the healing process.
- > It stimulates absorption of iron.
- > It acts as a powerful antioxidant, uptakes free radicals and prevents tissue damage. It slows down the process of aging, helps in stress and generally improves health.
- > It stimulates the production of white blood cells and improves the function of the immune system as well as the resistance of the body to infectious diseases. Vitamin C is reported to shorten the duration of diseases and reduce their severity.

## Symptoms of deficiency:

Drowsiness, increased tendency toward fatigue, loss of appetite, low resistance to infections, bleeding from the gums, increased tooth decay, fragility of blood capillaries, impaired collagen structures, joint deformation; long-term deficiency causes scurvy with subsequent death.

## Higher doses are necessary for:

Smokers, alcoholics, women using hormonal contraception, newborns, pregnant and lactating

women, individuals under stress and physical strain, people in recovery and during infections.

## Vitamin A (retinol) ●

It occurs either in the form of simple vitamin A or in the form of beta-carotene, which is composed of two molecules of vitamin A into which it breaks down in the body. High intakes of beta-carotene cause yellow colour of the serum and skin. A large supply of vitamin A is stored in the liver. The absorption of vitamin A is impaired by parasite intestinal infections.

## Effects:

- > It ensures good bone growth and development, as well as regular restoration of epithelial structures. It improves the quality of skin, hair, and nails.
- > It enables vision. It is part of rhodopsin (vitamin A + an opsin protein = a bound molecule of vitamin A straightens up when exposed to photons (light) and when straightened up, the impulse travels to the optic nerve).
- > Necessary for correct function of sex glands.
- > Removes free radicals.
- > Latest research points out its anti-carcinogenic effects

## Symptoms of deficiency:

Impaired adaptation to twilight (night blindness), damaged cornea, eye inflammation or conjunctivitis; in the long term leads to blindness, slowed down

growth and retardation, mucosa disorders, rough hair and skin, slowed down healing of wounds, generally reduced immunity of the organism.

**Higher doses are necessary for:**

Alcoholics, individuals with significantly low protein intake.

**Beware of high doses!**

In pregnant women, mega-doses of vitamin A (over 1mg per day) may cause developmental defects in the foetus, particularly CNS-related; yet their daily vitamin A requirement is slightly higher than in others. High doses are dangerous also in very young children as they cause liver enlargement and early closure of growth cartilages. Furthermore, its excess causes headache, chapped lips, irritation, dizziness, nausea, vomiting, loss of appetite, and itchy skin.

**Vitamin D (ergocalciferol D2, ●  
cholecalciferol D3)**

It includes several chemical substances, of which the most significant for practical application are vitamins D2 and D3. Both of them are formed in the skin exposed to ultraviolet light and their effects are almost identical. The substances which are formed from vitamins D are of hormonal nature and that is why vitamin D is considered to be so called pro-hormone. Normal diet usually does not cover the daily vitamin D requirement, and it is therefore important

to expose at least parts of the skin to sunlight on a regular basis (10 minutes per day is enough).

**Effects:**

- > It is responsible for the utilisation of calcium and phosphate from food; it stimulates their absorption in the intestine and resorption of these substances in the kidneys. It is responsible for the strength and elasticity of bones and teeth and their healthy growth.
- > It has a therapeutic effect in functional disorders of the parathyroid gland.
- > It acts prophylactically against the development of osteoporosis in menopause and in old age.

**Symptoms of deficiency:**

Rickets (rachitis) in children, osteomalacia (increasing bone fragility) in adults. The cause of deficiency may be not only inadequate intake or inadequate sunlight, but also impaired kidney function and severe liver impairments. Muscle weakness, tendency towards infections, lack of concentration, irritation, and increased sweating.

**Higher doses are necessary for:**

Children in the period of growth, seniors, people with functional disorders of the liver or kidney, artificial kidney, alcoholics, epileptics, and strict vegetarians.

**Beware of high doses!**

Long-term use of high doses results in the accumulation of calcium in the kidneys (calcification),

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with subsequent kidney failure. An acute intoxication demonstrates as headache, vomiting, pain in the bones, increased blood pressure and heart rhythm disorders.

## Vitamin E (tocopherols) ●

These are four chemically very similar compounds (alpha – delta tocopherol). No maximum daily dose has been established, as no negative side effects have been reported even from long-term use of mega-doses. Vitamin E has positive effects on the presence of the trace element selenium. Research suggests that natural vitamin E has a much higher efficacy than synthetic vitamin E.

### Effects:

- > It is a powerful antioxidant; it destroys free radicals and acts against the wearing and aging of the organism. It protects, in particular, all cellular membranes from damage and influences their stability and permeability.
- > It acts as protection against adverse reactions to skin irradiation (exposure to sunlight, radiotherapy) by inhibiting the formation of poisonous products which are formed by cholesterol metabolism in the skin due to UV irradiation. It also inhibits fatty acid peroxidation (that is why it is an ingredient in all marketed oils).
- > It acts prophylactically against the development of tumours (cancer).

- > It enhances the healing of wounds and immune system reactivity.
- > It has a positive effect upon the formation of sex cells and it stimulates fertility.
- > It stimulates the function of the nervous system.
- > It forms part of red blood cell membranes.
- > It is effective in the prevention and treatment of cardiovascular diseases.

### Symptoms of deficiency:

Nervous disorders and disorders of the blood formation process. Sex organ functional disorders and infertility. Anaemia, impaired immunity, and disorders of the fat metabolism.

## K (phylloquinone K1, pharnoquinone K2) ●

Under normal circumstances its sufficient production is secured by the activity of intestinal bacteria. A deficient production of vitamin K may occur during intestinal dysbiosis – an impaired balance of the intestinal microflora, and in inflammatory intestinal diseases (e.g. Crohn's disease), in intestinal absorption disorders, and deficient production of bile. In the body, vitamin K is enzymatically recycled in order to prevent its deficiency in case of insufficient production or intake, as it has a major role in blood coagulation. Vitamin K recycling is inhibited by a substance called coumarin (rat poison, but also an anti-thrombosis medicine); its effects may be reversed by the administration of vitamin K.

**Effects:**

- > Enables blood clotting (participates in the formation of prothrombin).
- > It is important for bone formation. It prevents the development of osteoporosis.

**Symptoms of deficiency:**

Impaired blood clotting – long-lasting bleeding from wounds, spontaneous bleeding from mucosa and visceral bleeding.

**Higher doses are necessary for:**

Infants, who suffer from vitamin K deficiency as their intestine is not yet colonised by bacteria. Patients with intestinal diseases. Intoxication by rat poison.

**B1 (thiamine, thiamine diphosphate, ● carboxylase)**

This is a truly essential component of nutrition. Vitamin B1 is much prone to disintegration and its losses occur both in food processing and inside the body, e.g. in excessive intake of coffee or tea. It is not stored in the body, and that is why regular intake is vital for the very functioning of the organism. Varied diet contains sufficient amounts of vitamin B1.

**Effects:**

- > It participates in the process of obtaining energy from glucose molecules.
- > It sustains good condition of nerves.

- > It participates in the process of fat and protein elimination.
- > It acts against fatigue.

**Symptoms of deficiency:**

Headache, loss of appetite, insomnia, nervousness, excess strain on nervous system, depression, melancholy, poor concentration, cardiac insufficiency; in cases of major deficiency the beriberi disease develops.

**Higher doses are necessary for:**

Pregnant women, alcoholics, people with intestinal absorption disorders, individuals suffering from long-lasting vomiting, thyroid gland diseases, and mental anorexia. People under stress and excessive physical strain. Heavy metal and nicotine intoxications. Wernicke encephalopathy. Frequent consumption of coffee and tea.

**Overdosage:**

Very rare. Headache, insomnia, irritation, weakness and accelerated pulse.

**B2 (riboflavin, ovoflavin, FAD, FMN) ●**

This is a yellow-orange natural dye which works in the body as a co-enzyme for the enzymes of the respiratory chain and participates in the process of obtaining energy from nutrients and in electron transfer. Overdosage does not occur.

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## Effects:

- > It is essential for basic cellular metabolism. It helps to burn fat and carbohydrates.
- > It is important for good skin and eye condition.
- > It enhances adequate heart function

## Symptoms of deficiency:

If a deficiency occurs, it involves the entire vitamin B complex. Affected mucosa and skin (oily, inflamed skin), chapped lips and corners, tongue inflammations, blood formation disorders.

## Higher doses are necessary for:

Children, adolescents and seniors, individuals with absorption disorders, vegans, alcoholics, diabetic patients, patients with thyroid gland, liver and gastrointestinal tract diseases (coeliacia). After the use of antibiotics and during the application of hormonal contraception. Infants after newborn jaundice.

## Vitamin B6 (pyridoxine) ●

This vitamin is abundant in food, yet its requirement for the body is relatively high. Chemically it is a mixture of three very similar substances which change to one another in the organism (pyridoxol, pyridoxal, pyridoxamine). Vitamin B6 is vital for a number of biochemical processes in the body.

## Effects:

- > It participates in protein metabolism – obtaining of energy from amino acids. It is a coenzyme of the enzyme aminotransferase. It is also involved in the process of formation of urea – a waste product which is produced from an amino group separated during protein metabolism.
- > It participates in glycogen break-down and in obtaining energy. Muscular activity uses up to 80% of vitamin B6 in the body.
- > It acts as prevention against nervous diseases.
- > It helps in premenstrual syndrome.

## Symptoms of deficiency:

Associated with the deficiency of the entire vitamin B complex. Inflamed and oily skin in the face, inflammations in the mouth, nervous system disorders, irritation, spasms, and red blood cell formation disorders.

## Higher doses are necessary for:

People with high intake of proteins in their diet (professional sportsmen), individuals using tuberculosis medicines, hormonal contraception, alcoholics, individuals with absorption disorders, red blood cell deficiency, chronically ill patients.

## Vitamin B12 (cobalamine) ●

This is a rather large and chemically complex molecule with a central atom of cobalt (the only

natural substance where the cobalt atom is bound to carbon). The source of vitamin B12 for people is exclusively food of animal origin (offal, meat, and yolk); the absorption of vitamin B12 in the body, moreover, is limited. For this reason it is, as the only vitamin soluble in water, stored in rather large amounts in the liver. For this reason its deficiency combined with zero intake demonstrates only after several years! Vitamin B12 is produced by bacteria in the large intestine, but because it is absorbed in the small intestine, the vitamin produced in this manner cannot be utilised by the human body.

**Effects:**

- > It has an indispensable role in the synthesis of fatty acids.
- > It participates in the formation of DNA and ATP building stones.
- > It is vital for the regulation and correct function of the nervous system. It improves memory and enhances concentration. It is essential for the formation of so called myelin sheath which protects the surface of the nerve.
- > It is essential for flawless blood formation. It helps to cure anaemia (shortage of red blood cells).
- > It reduces the risk of development of cardiac diseases.
- > It generally stimulates regenerative processes in the body.

**Symptoms of deficiency:**

Red blood cell formation disorder – anaemia, inadequate restoration of mucosa and tissue cells, nervous disorders, weight loss, deteriorated memory and mental performance.

**Higher doses are necessary for:**

Vegans, children of vegan and vegetarian mothers, individuals with anaemia, after surgical resection of part of stomach or small intestine, with inflammatory or parasite intestinal diseases (colitis, roundworm, tapeworm).

**Vitamin B9 (folic acid, folacin, folate)** ●

It is present in natural sources in the form of folates which first have to be converted to folic acid in the body. The presence of vitamin B12 is essential for the conversion of folic acid to the active form. It participates in the formation of nucleic acid building stones (DNA, RNA). It is not toxic even in high doses, more often it is deficient.

**Effects:**

- > Vital for growth and development.
- > It is responsible for the optimum development and function of the nervous system.
- > Reduces the incidence of congenital defects of the nervous system in newborns (if administered during pregnancy).
- > It helps to treat bacterial infections.
- > It helps in the treatment of cancer.

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## Symptoms of deficiency:

Demonstrate similar to those of vitamin B12 deficiency, but without nervous disorders. Typical is reduced red blood cell formation. Fatigue, loss of energy, tender tongue and mouth. Growth disorders and infertility.

## Higher doses are necessary for:

Pregnant women, as it enhances cell division in pregnancy, stimulates foetal growth and tissue differentiation, particularly in the nervous system. It prevents congenital developmental defects. Supplies of folic acid are also necessary for individuals with poor diet, liver diseases, and alcoholics.

## Vitamin B5 (panthothenic acid) ●

The active form of panthothenic acid is coenzyme A. It participates in the metabolism of all nutrients (synthesis and break-down of fatty acids, formation of cholesterol, saccharide metabolism) and in the synthesis of essential substances in the body (amino acids, hormones, etc.). The cosmetic industry uses it in the form of panthenol. It is present practically in any food, and its constant supply is vital.

## Effects:

- > It helps hair growth and regeneration.
- > It stimulates skin cell renewal, prevents inflammations and irritation of the skin.
- > It is involved in cell metabolism and catabolism.

- > It enhances the production of antibodies and stimulates immunity.

## Symptoms of deficiency:

Its deficiency is rare as its supply from diet is abundant. It has been examined experimentally. Spasms in legs, loss of appetite and insomnia, depression, and reduced resistance to infections.

## Higher doses are necessary for:

Alcoholics, diabetic patients, seniors, individuals with gastrointestinal tract diseases, people using hormonal contraception.

## Vitamin H (biotin) ●

Vitamin H is produced by intestinal bacteria. Biotin deficiency is a rather rare phenomenon. Biotin participates in the metabolism of amino acids and fatty acids.

## Effects:

- > It is responsible for good skin condition.
- > It is vital for adequate development of the organism

## Symptoms of deficiency:

Skin problems, hair loss, loss of appetite, nervous disorders. Anaemia in long-term deficiency.

## Higher doses are necessary for:

Infants, individuals with congenital metabolic defects, alcoholics, individuals with digestive system

diseases, people using medicines in the long-term. Individuals eating excessive quantities of raw egg whites.

### **Vitamin B3 (nicotinic acid, niacin, PP)**

The active forms of vitamin B3 serve as electron transporters in the respiratory chain of the organism. In the human body this vitamin is partially formed from the tryptophan amino acid and partially is supplied by food, where it is relatively abundant.

#### **Effects:**

- > It participates in the process of formation of all substances in the body.
- > It is important for development and growth.
- > It is vital for good brain function.
- > It reduces blood fat levels and eliminates cholesterol. It acts as prophylaxis against cardiovascular diseases.

#### **Symptoms of deficiency:**

Pellagra – reddening and gradual browning of the skin, diarrhoea, and loss of intellectual functions (dementia) in case of absolute depletion. Vertigo, headache, loss of weight, insomnia. Loss of the sense of smell and taste.

#### **Higher doses are necessary for:**

Pregnant and lactating women, alcoholics, vegetarians, people with kidney diseases and people

whose diet consists mostly of maize.

### **Choline**

It belongs in the vitamin B group. It is abundant in food and may be also produced in the body, but only in the presence of vitamins B9 and B12.

#### **Effects:**

- > It enters directly into brain cells, it protects the brain, improves memory, and helps to concentrate (produces acetylcholine). It helps to form lecithin, which is an essential part of nervous cell membranes.
- > It participates in fat transport and inhibits the accumulation of fats in the liver.
- > It eliminates cholesterol and acts preventively against the development of cardiovascular diseases (incl. atherosclerosis).

#### **Symptoms of deficiency:**

Memory disorders, impaired coordination, steatosis (lipid increase in the liver), cirrhosis (scarring of the liver), high blood pressure, atherosclerosis.

#### **Higher doses are necessary for:**

Individuals under long-term stress, with liver diseases, cardiac diseases, high blood pressure, kidney inflammation.

### 3. Overview of vitamin amounts in Blomultivitamin

	Vitamin	RDA	Blomultivitamin	% of RDA
C	ascorbic acid	60–100 mg – 1g	60 mg	100
A	retinol	1 mg	0,8 mg	80
D	calcipherol	10 µg	10 µg	100
E	tocopherol	>10 mg	25 mg	250
K		bacterae		
B1	thiamine	1–3 mg	0,9 mg	30
B2	riboflavin	1,5	0,95 mg	60
B6	pyridoxine	2 mg	2 mg	100
B12	cobalamine	2 µg	2 µg	100
B9	folic acid	0,2 mg	0,2 mg	100
B3	niacin	16 mg	2 mg	13
B5	panthothenic acid	6 mg	8 mg	130
H	biotin	bacterae	40 µg	100
	choline	1,5 g	2 mg	0,4

#### Notes to the table

**RDA** = average Recommended Daily Allowance for an adult individual; for children 50% of the quantity is appropriate

**Blomultivitamin** = content of vitamins in one capsule of Blomultivitamin

**Bacterae** = daily supply is covered by the activities of bacterae

## Evaluation of vitamin content in B!omultivitamin

The content of vitamin C in one capsule is optimal. In terms of human health its is a preventive dose which should be increased (ideally by the administration of Flavocel, not by a means of a higher dose of B!omultivitamin) in periods of higher requirement (e.g. increased bleeding, smoking, disease).

Due to a relatively high content of vitamin A which practically covers the entire daily requirement of an adult individual and because this vitamin is also much supplied by food, B!omultivitamin is not recommended for children under 10 years of age, in whom overdosage might occur! The same can be said of the content of vitamin D, whose content also covers 100% of RDA. In children and in long-term use of high daily doses overdosage, headaches, calcifications, and subsequent deterioration of the function of kidneys could occur. On the other hand, the use of a single capsule per day can significantly contribute to the prevention of osteoporosis in menopausal women and in seniors and generally may improve their hormonal balance.

The very high content of vitamin E (5 times more than in Vitamarin) does not cause any harm, on the contrary it significantly enhances the antioxidative, healing and regeneration properties of the product.

There is no risk of overdosage. The combination of the high content of vitamins A, E, H, and B5 suggests that the product will have a very positive effect upon good skin health and good health of any epithelial (covering) tissues.

The high content of vitamins B6, B12 and B9, which are much used by the body and whose intake in diet is usually inadequate, is of great significance. These substances primarily secure good condition of the nervous system and stimulate sufficient formation of red blood cells. The high content of vitamin B6 in particular influences the obtaining of energy and helps to combat fatigue.

# B!omultivitamin composition

**Product form:** soft gel capsules

**Capsule size:** 1400 mg

**Energy value:** 52 kJ/13kcal in one capsule

## Active substances:

INGREDIENT	AMOUNT IN ONE CAPSULE
Sea buckthorn (fruit extract)	200 mg
Aloe Vera (leaf extract)	60 mg
Pomegranate (fruit extract)	50 mg
Royal jelly	30 mg
Magnolia Vine, Schisandra	20 mg
Japanese quince (fruit extract)	20 mg

## Excipients:

Soy oil, gelatine, glycerine

## Recommended dosage

With regard to the optimal content of the recommended daily allowances of vitamins contained in the product, adults may use 1 capsule of B!omultivitamin once a day or every other day, if applicable. During an illness, strain or recovery the intake may be temporarily increased to 2 capsules per day (for a period not exceeding one week).

**Recommended daily dose:** 1 capsule taken once a day, ideally after meal

## Warning:

Not suitable for children, pregnant and lactating women!

Do not exceed recommended daily dose!

Not intended for persons with hypersensitivity to bee and soy products.

Nutritional supplements are not intended to substitute varied diet.

## Storage

Store at 10–25°C in a dry, dark place away from direct sunlight as it could destroy biologically active substances (oxidation).

## Authorisation by the Ministry of Health of the Czech Republic

OVZ – 35.0–5.4.07–12444

# Effects of individual components

## – description

### SEA BUCKTHORN

**Latin name:** Hippophae rhamnoides L.  
**Czech name:** Rakytník řešetlákový (úzkolistý)  
**English name:** Sea buckthorn, seaberry, Siberian pineapple  
**Oleaster family:** (Eleagnaceae)

#### Contains the following biologically active substances:

**Vitamins** – C, A, E, beta-carotene, B1, B2, B6, K, choline,

**Minerals** – Fe, Mn, S, B, Al, Ti, Si

**Other** – bioflavonoids (quercetin, campherol, rutin), catechins, amino acids, unsaturated fatty acids (oleic acid, alpha-linoleic acid), apple acid, tartaric acid, tanning agents, pectin, superoxiddismutase (an enzyme), serotonin.

Sea buckthorn is a hardy, easy to grow, dioecious plant, native in Europe and Asia. All of its parts may be used for therapeutic and cosmetic purposes.

#### Immunity, stress, fatigue

Sea buckthorn is considered a significant polyvitaminous plant with generally biostimulating and toning effects. It slows down the process of aging and significantly stimulates the immune system. It increases the resistance of organism to infections,

increases red blood cell count (acts therapeutically in anaemia), accelerates regenerative processes, healing, and is very suitable in recovery and overall weakness. Apart from its stimulating effect on the body it positively influences mental performance and increases resistance to stress and works against fatigue.

#### Cancer

Sea buckthorn exhibits powerful antioxidative properties and is able to eliminate toxic substances and free radicals from the body. Lately, the anti-tumour and radioprotective effects of sea buckthorn have attracted much attention. It is used, for example, in the treatment of cervical cancer and as a preventive agent in radiotherapy.

#### Digestion

Much importance is given to the finding that sea-buckthorn extract has significant bactericide effects, particularly against staphylococci causing digestive and intestinal problems. It stimulates digestion. It enhances the function of liver and pancreas, the production of digestive enzymes and bile. It is used in the treatment of peptic and duodenal ulcers and gastroesophageal reflux conditions. It has healing and calming effects on the mucosa of the entire digestive system. Furthermore, it helps in infectious hepatitis affecting liver and protects liver cells from cell death. It has therapeutic effects on the excessive function of the thyroid gland (Basedow's disease).

# Effects of individual components – description

## Heart and vessels

It improves blood circulation, acts against the aggregation of blood clots and formation of atherosclerotic plaques, and hence helps to prevent and treat atherosclerosis. It normalises blood pressure, protects the heart and vessels and improves their elasticity. It prevents cardiovascular diseases, from myocardial infarction through angina pectoris to haemorrhoids.

## Lungs

It has therapeutic effects on lung and bronchial conditions, asthma, it heals mucosa and dissolves mucus.

## Connective tissue

Due to its high content of vitamin C it stimulates the formation of collagen structures, improves the condition of joint cartilages, acts against arthritis, rheumatism and gout. Importantly, sea buckthorn helps to relieve pain.

## Skin

Internally administered sea buckthorn as well as externally used sea-buckthorn oil finds a wide range of application in the treatment of skin conditions. It heals wounds, burns, frostbite, acne, eczema, rashes, dry skin, poorly healing wounds, venous ulcers, and practically all skin problems. It acts against inflammatory processes, stimulates skin renewal, increases skin elasticity, reduces the formation of

lines and wrinkles, and heals up smaller wounds without scarring. It also prevents premature hair loss. Due to its high content of vitamin A it improves vision.

Constant administration of sea buckthorn does not pose any health risks, not even to children, pregnant women and breastfeeding mothers.

## ALOE VERA

<b>Latin name:</b>	Aloe vera, Aloe arborescens, Aloe barbadensis, Aloe variegata
<b>Czech name:</b>	aloe pravé, aloe západoindické
<b>English name:</b>	Aloe Vera
<b>Lily family:</b>	(Liliaceae)

### Contains the following biologically active substances:

**Vitamins** – A, C, B1, B12, choline, folic acid

**Minerals** – Ca, Cu, Cr, Fe, Zn, Mg, Mn, Na, K

**Other** – anthraquinone aloin, lipids, sterols, enzymes, amino acids, mucopolysaccharides, salicylic acid, lectins, emodin

Aloe is native to South Africa, and its wild form has spread in the Mediterranean, South-East Asia and elsewhere. Nowadays it is a very common house plant, easy to grow. All it needs is a stony soil and protection from frost.

### **Skin**

Let us leave aside the external application of Aloe Vera, which is truly wide. Aloe Vera has a very good impact upon the skin; it improves healing and regenerates skin damaged by radiation. It is an ingredient in a number of cosmetic anti-wrinkle products, sun lotions, and shampoos. If used internally, it also helps to treat skin conditions (skin allergies, acne, eczema, psoriasis, herpes, warts, burns, fungal diseases).

### **Digestion**

It improves the function of the digestive system (abdominal pain, nausea, heartburn, gastroesophageal reflux conditions, stomach hyperacidity, gastritis, peptic and duodenal ulcers, constipation or diarrhoea). Aloe Vera reduces stomach hyperacidity, has positive effects to pancreatic problems, and stimulates the excretion of bile. Higher doses of the laxative aloin and emodin may cause diarrhoea, stomach cramps, and excess blood in pelvic organs, and that is why it is necessary to avoid Aloe Vera particularly during pregnancy or if suffering from haemorrhoids. Internal administration of juice is not recommended in children.

### **Immunity, infections**

It stimulates and invigorates the immune system, increases resistance to diseases, as it has anti-inflammatory effects, and helps to suppress infections of viral, bacterial as well as yeast origin; it acts against

fungi (Candida) and intestinal parasites. It is effective against streptococci, staphylococci, Mycobacterium tuberculosis, E. coli, herpes and EB viruses.

### **Heart, vessels, detoxification**

It also helps to control blood pressure, headaches and dizziness; it cleans vessels and reduces cholesterol and fat levels in blood. It has detoxifying effects on the intestines as well as the vascular system. It helps the body to effectively eliminate waste products and toxic substances. It is one of the best natural products for detoxification and for slowing down the process of aging. In diabetic patients it decreases blood sugar levels.

### **Cancer**

Research studies have shown that aloe juice retards the growth and division of tumour cells. It is particularly effective in intestinal cancers, whose incidence in the Czech Republic is constantly the highest.

## **POMEGRANATE**

**Latin name:** Punica granatum  
**Czech name:** granátovník obecný, marhaník granátový  
**English name:** Pomegranate  
**Pomegranate family:** (Punicaceae)

# Effects of individual components

## – description

### Contains the following biologically active substances:

**Vitamins** – C, B (1, 2, 3, 5, 6), A, folic acid

**Minerals** – Na, K, Mn, Ca, P, Mg, Fe

**Other** – 77% of water, saccharides, fruit acids, citric acid, boric acid, flavonoids, alkaloids, tanning agents, tannin, inulin, ellagic acid

Pomegranate is a tree or shrub with ancient history, known for thousands of years. It is native to Anerior Asia and Iran. It has been grown in Palestine and Egypt from times immemorial. It has been venerated as a symbol of friendship, affection, love, abundance as well as fecundity. Nowadays it is grown in the subtropical zone all over the world. Many a reference to pomegranate may be found in the Old Testament and pomegranate images form part of many liturgical objects. This clearly indicates that in the past this fruit was much valued and venerated. Pomegranate has its firm position in the Eastern cuisine and in the preparation of refreshing beverages. The entire plant – foliage, pericarp, root peel, and fruit – has been used for therapeutic purposes for as long as 3,000 years. Pericarp and peel in particular contain large amounts of tanning agents with wide therapeutic application, yet possibly toxic in higher doses.

### Digestion

Pomegranate has positive effects on digestion and, in particular, stimulates the peristaltic activity of intestines. It is very effective in reducing the acidity

of the stomach content and acts against non-specific stomach ache and colic. Due to its tannin content it also helps to alleviate diarrhoea. For its high amount of alkaloids, extracts from the pericarp have been used also to combat intestinal parasites – helminth and tapeworm.

### Infections

Pomegranate also shows antiviral and antibacterial effects and prevents tooth decay, as it acts against bacteria present in tooth plaque and prevents the development of mouth infections. It is also effective against yeast infections caused by the *Candida albicans* yeast, which is the agent of many diseases (gynaecological and skin conditions). A pomegranate extract is hence applicable in infections of any origin.

### Heart and vessels

It decreases the level of LDL cholesterol in blood and high systolic blood pressure. It reduces the risk of cardiovascular diseases and atherosclerosis.

### Cancer

Lately, attention has been paid particularly to the anticancer effects of pomegranate juice. Scientific experiments suggest that pomegranate has both prophylactic and therapeutic effects on prostatic cancers. Due to the high content of present antioxidants it provably slows down tumour cell growth. Good results of pomegranate administration have been reported also in benign prostatic

hyperplasia (prostate enlargement). Similar results have been reported also for lymphatic node cancer.

### Menopause

Latest studies have shown that pomegranate has the ability to stimulate the production of oestrogen and could be a suitable natural alternative for the treatment of menopausal problems.

### Detoxification

Pomegranate extract has overall toning and antioxidising effects; namely due to the content of ellagic acid it helps to eliminate free radicals from the body and generally detoxify the organism.

## ROYAL JELLY

**French name:** Gelée royale

**Czech name:** mateří kašička

**English name:** Royal Jelly

### Contains the following biologically active substances:

**Vitamins** – A, C, D, E, B (1, 2, 3, 5, 6, 12), H, folic acid

**Minerals** – Na, K, Mn, Si, Fe, Co, Au, Ca, Cu, Cr, Ni, Mg, S, Br, P, Zn

**Other** – choline, acetylcholine, inositol, nucleotides, amino acids, glycoproteins, enzymes, hormones

Royal Jelly is a natural product secreted from the pharyngeal glands of worker bees. It is a growth substance which influences the development of the queen bee. It is in fact a special concentrate of nutrients which allows the queen bee to live more than five years, although worker bees live no longer than 2-4 months. The spectrum of diseases where Royal Jelly acts therapeutically is very wide, both due to its extraordinary nutritional value and high content of valuable vitamins and a number of trace elements.

### Skin

In external and internal use Royal Jelly improves skin condition and treats a number of skin diseases (eczema, dermatitis, psoriasis, etc). It dramatically smoothes and rejuvenates the skin, as it stimulates the renewal of covering tissue cells (epitheliums).

### Immunity

If used internally, Royal Jelly generally improves health, has anti-inflammatory effects, stimulates the immune system, and improves resistance to infections (bacterial as well as viral ones).

### Mental health

It improves mental health and helps to combat nervous exhaustion, moodiness or mental strain. It reinstates good humour. Positive effects have been reported from the treatment of neurosis and paranoia. It improves sleep, acts against increased fatigue and insomnia, migraine and headache. It generally

# Effects of individual components – description

improves the health and mental condition of seniors and patients with sclerosis.

## **Loss of appetite**

It helps against loss of appetite of any origin, and stimulates weight increases in prematurely born babies and in the elderly. For its ability to improve appetite it may be applied as supplementation in the treatment of mental anorexia and in recovery.

## **Digestion**

It helps in intestinal disorders and is effective in the treatment of peptic and duodenal ulcers.

## **Blood, heart, and vessels**

It stimulates the formation of blood, increases the amount of red blood cells, and acts therapeutically in the treatment of anaemia (shortage of red blood cells). It is suitable for the stimulation of blood formation after major loss of blood, e.g. during delivery, menstrual bleeding or surgery. It protects the vascular system, due to natural vessel dilatation it controls blood pressure and improves the elasticity of vessel walls. It reduces cholesterol and fat blood levels. It helps to reduce blood sugar level (glycaemia). It has positive effects especially in diabetic patients who have problems to maintain their dietary regimen.

## **Connective tissue**

It supports recovery and healing. It also helps to

maintain good condition of bones, joints, and all connective tissues. It prevents the development of osteoporosis.

## **Liver regeneration**

Royal Jelly has positive effects also on liver, kidney, and pancreas conditions. It helps to eliminate toxic substances from liver cells, enhances their regeneration and protects them from adverse effects of chemical drugs (antibiotics, hormonal contraception, etc.).

## **Adrenal glands**

It stimulates the function of adrenal glands and the production of hormones both in adrenal medulla and cortex (adrenalin, corticosteroids). Due to this it generally increases the immunity of the body, plays a role in stress response, influences blood pressure and subdues inflammatory and allergic reactions (it has shown positive results also in the treatment of asthma). It also improves the function of sex glands and shows very good effects in menopausal women.

## MAGNOLIA VINE, SCHISANDRA

**Latin name:** Schisandra chinensis  
**English name:** Magnolia Vine, Schisandra  
**Czech name:** klanopraška čínská  
**Schisandra family:** (Schisandraceae)  
**Name used in Traditional Chinese Medicine:** wuweizi

### Contains the following biologically active substances:

**Vitamins** – C, E

**Minerals** – K, Ca, Fe, S, Mg, Na, P, Ag, Mo, Ti

**Other** – tartaric, apple, citric, succinic, and oxalic acids, glycosides, flavonoids, lignin, schizandrin, phytoestrogens, beta-sitosterol

Schisandra belongs to the evolutionally oldest family of dicotyledonous plants and in China it is a known, traditionally used plant. This woody climber is famous for its “five flavour fruit” which is said to possess all five basic flavours (salty, sweet, sour, pungent (spicy), and bitter). It is distributed in the Far East, China, and throughout the territory of the former Soviet Union. With some care Schisandra may be grown also at home.

### Immunity, nerves, fatigue, and stress

Schisandra is primarily a toning, re-energising plant which increases resistance, generally stimulates

the organism and increases also physical and mental activity (it is classified as an adaptogen). It is valued for its stimulating effects on the central nervous system. It acts in the treatment of the fatigue syndrome, depressive conditions, and excessive stress. It helps in the formation of brain neurotransmitters, improves concentration, and short-term as well as long-term memory. It has also aphrodisiac and stimulating effects (improves sexual performance and sensitivity, helps to treat impotence), but also helps to combat insomnia. This suggests that rather than acting solely as a stimulant, it possesses the ability to level off the swings of the nervous system. In terms of Chinese medicine, Schisandra helps to balance yin and yang energies.

### Heart and vessels

It helps in the prophylaxis of all civilisation diseases. It particularly prevents the development of cardiovascular diseases and diabetes. It stimulates the heart and vascular system; it dilates vessels, improves cardiac function, and controls low blood pressure. It normalises cholesterol and sugar levels in blood.

### Skin

It improves and vitalises the skin.

### Digestion

It improves the function of the digestive system. It protects liver (activates the enzyme producing glutathione) and it is suitable in inflammatory liver

# Effects of individual components

## – description

diseases (viral hepatitis). It protects liver cells from damage, be it damage caused by viruses or by chemical substances (medicines, alcohol, drugs). It also improves the clarity of vision, as it regenerates the eyes, which according to TCM have close associations with liver.

### **Kidneys and adrenal glands**

It stimulates the function of kidneys and adrenal glands.

### **Lungs**

It is effective against cough, asthma, and chronic bronchitis. It stimulates breathing and helps to combat lung diseases; it particularly facilitates the release of mucus from lungs. It has positive effects on individuals living in polluted environment.

### **Immunity, infections**

It stimulates the immune system and has antioxidative, antiviral, and antibacterial effects. It is considered a plant which prolongs life. It is very efficient in chronic viral diseases.

### **Menopause**

The present phytoestrogens have a good effect on menopausal women.

It is not suitable for individuals with high blood pressure and epilepsy.

## JAPANESE QUINCE

<b>Latin name:</b>	Chaenomeles japonica, Chaenomeles speciosa
<b>Czech name:</b>	kdoulovec japonský, kdoulovec ozdobný
<b>English name:</b>	Japanese quince; Japanese flowering quince; dwarf quince
<b>Rose family:</b>	(Rosaceae)

### **Contains the following biologically active substances:**

**Vitamins** – C, A, B1, B2

**Minerals** – Ca, Na, P, K, Fe

**Other** – pectin, tanning agents, fruit acids, essential oils

Japanese quince is an undemanding deciduous shrub with red blossoms and small, hard, yellow-green pomes. Due to the presence of ethereal oils its fruit is intensively scented. Quince is commonly used as ornamental wood. The taste of the fruit is very sour and mouth-puckering, which is caused by the high content of fruit acids, tanning agents, and vitamin C (more than in lemons; it also tastes like lemon).

### **Digestion**

For its high level of pectin (more than in apples), quince extract has positive effects on the digestive system, it cleans it and stimulates its function. It enhances the formation of protective mucosal covering of the walls within the digestive tract. It improves the peristaltic activity of the intestines, helps to combat spasms, constipation, and diarrhoea. Some sources report that it helps to prevent the development of intestinal cancers. It decreases cholesterol levels also by preventing its absorption in the intestine.

### **Infections**

It has anti-inflammatory effects on any mucosa in the body; it protects the gums and the lining of the digestive tract, and prevents vaginal discharge. The astringent substances contained in quince possess analgesic and anti-inflammatory effects. They act positively against joint pain and sore throat. They prevent the development of infection, particularly in the digestive tract. Due to their astringent (mouth-puckering) effects they help in the treatment of peptic ulcers.

# General evaluation of B!omultivitamin application suitability

Recommending vitamin products poses a problem, as it is usually difficult to get a comprehensive picture of the specific client's diet. In a varied, well-balanced and biologically active diet there is no need to supplement vitamins. Basic vitamin and mineral requirement, however, increases – simply speaking – with improper diet, which is the most common problem in our population.

We may hence assume that people who eat out most of the time (in fast food facilities, cafeterias, etc.), whose diet is monotonous and chemically treated (food additives, chemical preservatives, etc.), who eat lots of sweets, smoke and often drink alcohol and coffee, can easily suffer from vitamin deficiency. Also the overall environmental pollution means that our enzymatic processes have to cope with constant degradation of many toxic substances, and with increased enzymatic activity the vitamin requirement grows as well. Lower vitamin intake and higher vitamin requirement is more likely in people living in cities rather than in people from rural areas whose diet is at least partly covered from their own resources. In this context it should be noted that due to the increasing pollution of the environment, soil, water, and acid rain, the contents of vitamins and minerals in crops constantly decreases. Plants grown organically have much better vitamin balance. Swings in vitamin intake may also easily occur with sudden change of diet, when staying abroad, when maintaining a therapeutic or weight reducing diet,

when switching from home-made meals to catering, during lack of fruit in winter months, when constantly using microwave oven, in long-lasting diarrhoea, etc. Swings are frequent especially in vitamins soluble in water (C and B), which have to be supplied on an everyday basis and whose deficiency hence becomes apparent very quickly. Due to its optimal content of vitamins A and D this product may be strongly recommended to people whose diet lacks fat fish or those who are allergic to fish products, and also to people who, for whatever reason, lack exposure to sunlight. For people who regularly eat fat fish, however, there is a risk of overdosage in long-term use of B!omultivitamin, as it includes vitamins which accumulate in the body. It is necessary to stress that daily doses should not be exceeded!

In order to maintain the physical condition of an adult person, one capsule per day should be taken. Where it is obvious that the client in their diet follows the principles of healthy eating, 1 capsule every other day could be sufficient. The dosage may be increased in the short term only in the event of strain, disease, and especially to support healing processes; the maximum dose being, however, 2 capsules daily. The benefit of B!omultivitamin lies in its purely natural character (it contains plant and fruit extracts), which distinguishes it from the usual synthetically manufactured multivitamin products that, to no avail, burden the organism with the content of necessarily present chemicals, may cause nausea and often are

not absorbed in full scope. Due to its composition, B!omultivitamin helps to maintain the good condition of the digestive system, and hence secures the optimal utilisation of the product ingredients.

The presence of plant extracts significantly extends the positive effects of B!omultivitamin. All of its ingredients have provable anti-inflammatory effects and help to maintain the correct function of the skin, of the immune, digestive, cardiovascular, and nervous systems. Human immunity is closely related to the mental condition, and the concurrent action of B!omultivitamin in both of these spheres is thus a major benefit. The product could be also much effective in the treatment of peptic ulcers, spasms and non-specific abdominal pain. In the elderly with bad diet in particular it may be assumed that the use of B!omultivitamin will have a major effect on the improvement of both mental and physical condition and a generally higher resistance to fatigue.

Mgr. Tereza Viktorová



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