

# **SCIENTIFIC OPINION ON THE MEDICAL AND BIOLOGICAL CHARACTERISTICS AND BENEFITS OF “VEGAPLUS” POWDERY FOOD**



*Prof. Dr. Donka Baikova, MD\**

## **RELEVANCE AND HEALTH AND SOCIAL SIGNIFICANCE OF THE INNOVATIVELY FORMULATED “VEGAPLUS” POWDERY FOOD**

It is an indisputable scientific fact that food is one of the most powerful factors in maintaining good health, preventing diseases and facilitating healing processes after illness and/or traumas and surgical interventions. In recent decades, nutritional supplements, functional and innovatively formulated foods have been included to balance the healthy diet of modern people who are accustomed to fast food, subjected to stress and sedentary lifestyle. The biologically active substances in their composition: have antioxidant properties to address adverse health risks from the actions of free radicals; improve immune protection; have cardioprotective, anticarcinogenic and anti-inflammatory effects; support the functions of certain organs and systems in the human body.

## **ESSENCE OF THE NEW “VEGAPLUS” POWDERY FOOD**

Vegaplus is an original nutritional composition of 29 recipe ingredients that are sources of valuable plant proteins (37%), complex carbohydrates (13%), a minimal amount of fat (6.5%), a number of macro- and micronutrients and other natural ingredients with high biological activity as follows:

- Plant-based protein sources: organic low fat raw hemp protein, rice protein hydrolysate with 80% protein content, chlorella;
- Barley grass juice powder which enriches the new food formulation with a number of antioxidants, chlorophyll, B group vitamins, macro- and microelements;
- Selected amino acids are also included: the indispensable (essential for humans) L-lysine, which is limiting (deficient) in most cereals and in many vegans; the non-essential amino acids taurine and creatine. Taurine, on the other hand, participates in the conduction of nerve impulses, lowers the heart rate, detoxifies. Taurine and creatine help to restore muscle strength in case of fatigue and exhaustion. Taurine and creatine deficiencies are common in vegetarians and vegans;
- Water-soluble vitamins: Vitamin C increases tissue resistance and is a powerful antioxidant; B vitamins (B1, B2, B3, B5, B6, B12) participate in the activation of all metabolic processes, blood cell formation, functions of the nervous and cardiovascular systems. Vitamin B12 is missing in the composition of the usual plant foods, therefore, the supplementation of dietary intake in vegan dietary patterns with vitamin B12 is extremely important;
- Fat-soluble vitamins: Vitamin A participates in maintaining the functional activity of the skin, mucous membranes, eyes, reproductive system; Vitamin D is responsible for bone density, immune resistance, brain activity; Vitamin E is an antioxidant and hormone and the cardiovascular system activator;
- The minerals included in Vegaplust – calcium (Ca); magnesium (Mg); zinc (Zn) are part of the body fluids, bone structure and dental tissues, they activate the functions of the endocrine glands, blood formation, nervous system and immunity, and participate in the regulation of muscle tone;
- An ingredient of Vegaplust is also Carob, which has a pleasant chocolate taste and high fibre content and is caffeine-free. Ceylon cinnamon with antimicrobial and antidiabetic properties has been added to support the organoleptic and medico-biological benefits of the product;
- The technological additives in Vegaplust are of natural origin: sweetener – steviol-glycosides from the stevia plant (with zero calories); flavouring – defatted cocoa powder (a source of minerals and vitamins and with a rich

antioxidant spectrum); thickener – guar gum; emulsifier – sunflower lecithin (memory stimulator with antisclerotic effect)

- “Vegaplus” does not contain GMOs as well as hydrogenated fats (trans-fatty acids);
- It features high European (German) quality, supported by laboratory analyses from reputable accredited bodies.

### **GUIDELINES FOR APPLICATION OF THE NEW FORMULATED VEGAPLUS POWDERY FOOD**

The author’s solution for a nutritional formula can definitely have claims for assigning the new Vegaplus powdery food to the group of functional foods. Considering the presented rich nutritional and multivitamin-polymineral formula, the guidelines for application could be outlined.

The new Vegaplus powdery food can be recommended FOR:

- Optimizing the imbalances of main nutrients (proteins, carbohydrates, fats), but also enriching the usual dietary pattern of the modern people;
- Increasing the body’s antioxidant protection;
- Improving immune resistance;
- Activating the metabolism of fats, carbohydrates and proteins;
- Regulation of blood cell formation;
- Supporting the structure of the bones, the functions of the joints and the muscles, including during heavy physical exertion and after injuries;
- Support of dietary plans for reduction of overweight and obesity (low energy value – < 30 kcal in one measuring spoon).

### **Instead of a conclusion**

The innovative Vegaplus powdery food was created as an enriching component of the usual dietary pattern of the modern people and is appropriate for consumption during risky seasons of the year, in periods of long-term fasting, by people who actively do sports, to support recovery processes after illness, in cases of one sided and/or vegetarian dietary patterns, by “risk” population groups, whose specific metabolic requirements for nutrition are increased, by patients with eye, skin-mucosal, infectious, cardiovascular, oncological and metabolic problems, obesity and type II diabetes and for the prevention of chronic non-infectious diseases, related to nutrition.

---

\* **Prof. Dr. Donka Baikova, MD** is a distinguished Bulgarian medical scientist, lecturer at the Sofia Medical University and a renowned Bulgarian dietitian with many years of practical activity.

Currently, prof. Baikova conducts medical consultations for patients and prepares individual dietary regimes for the treatment of: overweight and obesity; eating disorders; metabolic syndrome; type II diabetes; dyslipidaemias and cardiovascular complications; gastrointestinal; biliary-biliary-hepatic; pancreatic; renal; autoimmune diseases; recovery after severe surgical interventions; nutrition for pregnant and lactating women.

***Education:***

- Graduated from the Burgas German language high school with a gold medal;
- Studied medicine at the Sofia Medical University;
- Furthered her medical education and became a specialist in nutrition and dietetics;
- Completed a Doctorate degree program in nutrition and dietetics and earned a degree of Doctor of Medicine (MD).

***Work experience and academic positions:***

- Research Associate, Associate Professor and Professor at the National Centre for Public Health and Analyses and the Faculty of Public Health to the Sofia Medical University.
- An expert and consultant to the Ministry of Health on the issues of health legislation and preliminary health control of food and nutritional supplements;
- Taught / managed dozens of Postgraduate courses on nutrition and dietetics.
- A consulting specialist at the "MARKOV'S" Medical Centre, Sofia (current).

***Specialisations in:***

Germany, Belgium, Hungary, Slovakia, Russia, Ukraine, Poland

***Memberships:***

Bulgarian Society of Nutrition and Dietetics; Federation of European Nutrition Societies (FENS); Bulgarian Association for Study of Obesity and Related Diseases

(BASORD); International Association for the Study of Obesity (IASO); Balkan Medical Union; Bulgarian Medical Association.

***Publications and scientific achievements:***

- Published more than 500 scientific articles in Bulgarian and foreign specialized editions;
- Participated in over 200 Bulgarian and international scientific forums – congresses, symposia, conferences;
- Authored the monograph “Let’s lose weight without hunger” (2013) and a number of sections in monographs and study aids for specialists and students;
- Created one invention and two rationalizations;
- Supervised 16 doctoral students and 22 graduate students;
- For her overall scientific and educational achievements, Prof. Baikova has been awarded the Sofia Medical University special award “**Golden Panacea**”.