The Newest Experience with Effervescent Tablets Containing Royal Jelly as Functional Food on Packing, Dosage and Synergistic Action in Prevention, Prophylaxis and Healing

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Abstract

The subtlety of the ruling and preservation of the royal jelly from the beehive has contributed in the last 100 years many research teams and leading scientists around the world to work on the same topic in this area. The scientific-skilled and managing team of the Golden Bee (Zlata phella) has been working during the last 15-year period on research and dose of royal jelly. The technological development has also enabled the team to produce with success products in which the royal jelly should be packed, and preserved, bioactive stable and correctly dosed at the same time. This innovation has enabled an application of the royal jelly to all age population categories including children, pregnant women, diabetics, sports men and the other, no matter what their sex is. The action of the royal jelly products as functional food has proved that they have saved the treasure of the all minerals, vitamins (from B1 to B12) pantothenic acid, simple sugars, 23 amino acids and unsaturated fats, as well as above 105 biostimulators and 85 native antibiotics. The adopted on this way royal jelly was taken in through the mouth keeping its power of detoxification, nutrition and regeneration of the human cells. The usage of this shape of the royal jelly during the last 15-year period has proved the effect of the royal jelly on the human organism in prevention, prophylaxis and treatment. During this period laboratory and clinical investigations were conducted on 500-1000 patients from each medicinal area, what was the subject of an elaboration, whereas prevention was undertaken of above 100 000 users originating from many European countries including Serbia, Macedonia, France, Czech Republic, Kosovo and other countries.

Keywords: Functional food; Apitherapy; Royal jelly; Effervescent tablets; Health benefits; Prevention; Prophylaxis; Disease treatment

Introduction

The concept of functional and natural foods, associated with positive health benefit include foods that have been consumed locally or regionally for many generations. As public interest in nutrition and healthy eating has increased, there has also been an increase in demand for healthy foods and food production system. The term functional food was first introduced in Japan in the mid-1980s and refers to processed foods containing ingredients that aid specific bodily functions in addition to being nutritious [1]. The functional foods were defined as “any food or food ingredient that may provide a health benefit beyond the traditional nutrients it contains” [2].

More recently, food manufacturers have used the health criterion in the development of “functional foods”, food products that have an added positive health benefit. While some functional ingredient benefits may be perceived to enhance short-term well-being or performance ability, many health benefits envisaged for functional foods deal with long-term reductions of risks of certain diseases. This type of health benefit is generally invisible for the average consumer and is hence a question of communication. Very often, traditional and natural foods are considered healthy.

The scientific-skilled and managing team of the Golden Bee (Zlata phella) has been working during the last 15-year period on application of food technology studies to develop formulations for production of novel functional foods for health prevention, prophylaxis and treatment many diseases. This required a combination of skills and disciplines seldom found in the industry and science.

Apitherapy and Public Health

Apitherapy is a medical concept, based on a scientific approach reinforcing traditional knowledge, including: protocols and standards for a beekeeping production with medical destination; procedures for transforming beehives products, alone or in association with medicinal plants and their derivates (Api-pharmacopoeia); clinical protocols integrating the use of apipharmacopoeia and/or bees (Api-medicine) [3].

Regular application of apitherapy has independent positive effect on the prevention of diseases of the contemporary man such as cardiovascular disease, type 2 diabetes, osteoporosis, obesity, depression, and it may also lengthen the life-span. Benefit of the apitherapy are seen at even modest levels of application [4-6].

The honeybee

The honeybee forms two female castes—the queen and the worker [7]. This dimorphism is not based on genetic differences, but on ingestion of royal jelly (RJ). The feeding of queen bees with RJ allows it to be developed properly. The RJ is a thick, extremely nutritious, milky-white, creamy liquid secreted by the hypopharyngeal glands of the nurse bees.

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Queen bees live exclusively on RJ and it accounts for their incredible size and longevity. They average 42 percent larger and weigh 60 percent more than the worker bee, living 40 times longer than the worker bees, seven years as compared to seven weeks. In the wild, queen bees will produce 2,000 eggs per day with each day’s brood equal to 2 1/2 times her own body weight. Queen bees live longer than their workers thanks to a miraculous nutrient in the milky liquid that makes up their whole diet.

The eating habits of queen bees mean they become almost twice the size and more than double the weight of other female bees, despite having no genetic advantage. The active ingredient of RJ, the chemical brew produced from pollen and secreted from glands on the top of young nurse bees’ heads, also helps them become larger and weigh more than the rest.

The powerful properties of RJ have fascinated people for thousands of years, going back to the time of the ancient Egyptians who used it to keep their skin glowing. It was even used to help preserve the mummies.

**Composition and nutritional value of royal jelly**

Royal jelly is the richest diet of nature. Its high nutritional value is due to the unique composition. RJ is a rare natural substance containing the all five nutritive and building materials (proteins, fats, carbohydrates, vitamins and minerals) in such a condition that they can enter directly in the blood [8].

Modern spectrometric analyses detected that RJ contains about 185 different organic compounds, with the most important one being a protein called royalactin. It is considered that the royalactin is the compound in RJ most responsible for allowing a larva to morph into the queen bee [7].

RJ is the only natural source of a substance called acetylcholine. Acetylcholine contains 17 amino acids, including the 8 essential amino acids, which are very important for body growth and for the operation of the immune system. Like the other bees’ products it has also antibacterial and antimicrobial characteristics [9-11]. The RJ is also extremely rich in vitamins: thiamine, riboflavin, niacin, antioxidant acid, pyridoxine, biotin, folic acid and smaller amounts of vitamin C, D, A and E. It also contains several other nutrients, including aspartic acid, which aids in cell, muscle and tissue growth [8].

The sugars in RJ consist mostly of fructose and glucose at a relatively constant ratio, resembling that of the honey. In several cases, fructose and glucose together comprise 90% of the total sugars. The other sugars are maltose, erosion and ribose.

The lipids consist mainly of fatty acids with unusual structures, including the acid, which has antibacterial and fungicidal properties. The RJ also contains neutral lipids, sterols and waxes.

The main minerals are potassium, calcium, sodium, zinc, iron, copper and manganese, with a strong predominance of potassium.

**Royal jelly and health benefits**

The RJ has a wide variety of unique health benefits: it enhances the immune system, promotes wound treatment, has antitumor/anticancer properties, lowers cholesterol levels, increases fat metabolism, and regulates blood sugar levels being a powerful antioxidant [8]. The action of RJ on the cell level was investigated on the genetic material proving that its disturbance was returned into a normal condition by the using of RJ [12].

The RJ influences on the nervous, endocrine and immune system, what is rear capability because of what scientifically it is known as an adaptogene substance which can increase the body resistance against infections and other harmful actions of the environment, i.e. it helps the organism to be adopted in the environment conditions, initiating the maximal life age without diseases with maximal fertility and creativity.

The basic action of the RJ which contributes it to be more than a food, is the preventive action from appearing of a disease and faster healing, acting on the cell level. All the bioactive materials which contains the RJ can be directly included in the fundamental life processes and to influence on the man’s health. This action includes the RJ in the life “intelligent” substances because by entering in the cell it has a dynamic relation with it’s the most important functions allowing on the own way to take what the most needs, while storing the other as energy for further needs. This balancing and normalizing of the cell life functions are based on the two most important capabilities of the RJ: detoxification and regeneration.

RJ with the other beekeeping products-honey and pollen ingested in the respective nutritional regime, especially represent an ideal food before and after surgery, because being in a small volume, but in great concentration they contain the all elements which are necessary for the organism: glides, which pass through the digestive tract filter going directly into the blood system, without energy lost contributing to the cell exchange and stocking of glycogen in the liver.

Since mid 1960 when modern chemistry was applied in development of the pharmaceuticals, the scientist began understanding that RJ has direct effects on the life and the health of the cells in the human body. Scientist concluded that RJ is stimulating the cells to perform better; it improves overall health of the cell and provides better absorption of all necessary items which are necessary for normal life of the cell. However, till now a days the mechanism of the processes listed above have not been explained in any scientific study linking RJ and its application as a food or remedy. The capability of the RJ to enter into the cell allows it to defense against a great number of pathogenic microorganisms, what is due to the presence of native antibiotics with an origin from phytoncides, the substances by which the plants defense against the microorganisms [13]. Laboratory analyses have shown that these antibiotics have a strong antimicrobial action, as well as an action against the microorganisms attacking the man from his organism: bacteria, viruses, molds and parasites, neutralizing and they destroy them in a very short period. The two very important advantages of these antibiotics from the RJ are firstly, they could not become resistant to the microorganisms, and secondly they act inside the cell. The most sensitive to the RJ are the influenza viruses, herpes simplex, hepatitis, and kokksaky virus in the solution of RJ in the ratio of 1:1000.

**Application of the technology-lyophilization**

The native RJ taken directly from the bee hives is biologically active only for 48 hours. After this time it’s the most useful ingredients decompose in the presence of the own water molecules, which are present up to 70%. Because of this, a man cannot use the RJ, so the scientists have applied the comprehensive technological procedure of lyophilisation to preserve the biological activity of the RJ. The technology of obtaining of RJ is well known, but the preservation of RJ in plant conditions is by lyophilisation, which is based on the alternatively cooling and heating of the product [8]. RJ is sublimated into dust at the extreme low temperature and the high vacuum. By this way the RJ is preserved in the form of effervescent tablets-Shumileta for...
A program of functional nutritive products containing royal jelly

A program of functional diet was developed at the Golden Bee offering a variety of nutritive products containing RJ in the form of effervescent tablets (ET)-SHUMLETA.

The ETs containing lyophilized RJ are simple, having a practical and technologically advanced way of using the RJ in the everyday nutrition. They represent very important nutritive and ecological products, which are also suitable for small children, diabetics and other sensitive population. The ET is dissolved in a glass of water due to sodium bicarbonate, which takes a part in keeping the acid-base balance in the body. A refreshing taste is achieved by addition of fruit acids and aroma obtained from natural sources and according to the highest pharmaceuticals standards. Products are certificated by ISO (9001:2000) and HACCP standards.

Every effervescent Sumleta tablet contains at least 10 mg of lyophilized RJ, what is equivalent to 33-35 mg of native RJ, representing an optimal dosage for prevention and rehabilitation.

The ET containing the lyophilized RJ, is an unique natural substance that contains amino acids, essential fat acids, simple sugars (monosaccharide), vitamins, minerals and bio stimulators-everything needed for an effective body functioning. RJ is known as an "intelligent substance" because it acts at the cell level and equally effectively balances hyper (increased) and hypo (decreased) functions, acting on a stimulative, regenerative and detoxicative way. By adding vitamins and minerals to the RJ in the effervescent tablets, a unique synergistic combination was achieved, thus increasing even more the salutary effect of the product components on the body health. Carefully chosen natural flavors of lyophilized fruits have made Shumleta, in an organoleptic way, to a level of a unique and soothing experience for the consumers.

The focus of Golden Bee was the use of RJ as a nutritional supplement and its nutritional and medicinal values in improving the overall health of the people. The other substances are added knowing that RJ is excellent vehicle and dosage instrument on a cell level. They are well known needed substances for each symptom treated with RJ.

The various kinds of the products-ETs, their composition, health effects and package are presented in the Table 1.

Application of the Royal Jelly Products in Treatment-A Choice of the Long Term Intensive Treatment Practice

Effect on anemia

Sideropenic anemia is characterized with the low iron level and it belongs to the global health problems. It can be present with the adults and children, and especially with the pregnant women in the fetal period can cause severe consequences on the neural and immunological child system, having later problems in the growing and development, as well as the premature birth of a child [14-16]. The symptoms are decreased concentration, sleeping wishing, weakness, limited working ability and other.

The iron (Fe) is an essential element for maintaining the man’s health. About 1-2 mg of Fe are losing daily, and 5% must be filled by the nutrition, while 95% are obtained from the aged blood cells. A typical diet consists of 10-20 mg of iron daily intake, of which only 10% are reabsorbed (1-2 mg/day). The iron metabolism begins with a severe controlled absorption in order its oversaturation to be prevented. Besides the low iron level, sideropenic anemia is characterized also with ferritin (deposited Fe), increased level of TBC and transfer receptors (ability of the body to make fresh Er). Ferritin is an intracellular protein which deposits the iron in nontoxic (trivalent) form and releases it in a controlled way depending on the needs. The ferritin level in the body is proportional to the amounts of deposited iron and it has a buffer effect between the iron deficiency and the overload in the body [17]. Pero effervescent tablets (FET) containing RJ from the program of “Golden Bee” acts as protection of the erythrocytes, prevents their hemolysis, corrects possible sideropenic anemia and corrects also the decreased immunity.

We have administrated over 300 patients with the characteristic symptoms of sideropenic anemia, including both men and women, in the age from 3-82. The treatment was only with the products of the program of the Golden Bee. Depending on the patients age and the obtained results, the recommendations were different, especially in the cases of children. The time of treatment was individually from 2-6 months. After this period the patients have taken the products as prevention against anemia. The adults were advised to take FET (3x1) in combination with Ca tablets (3x1). In the case of strong developed anemia (Hb < 8.0 g/dl; RBC <3, 500 10^12/l, MCV 65-75 g/l; TBC > 78. 8 μmol/l, ferritin <20 μmol/l; saturation < 8%) the patients were advised to take Proherbis drops (a product containing propolis) (3x25-30 drops) in a glass with the ET. With pregnant women and patients with “sensitive stomach” which have badly bear the remedies, with the patients with chronic gastritis, as well as with those who were on dialysis, the Proherbis drops were recommended to be taken 15 min. before taking the ET or together with the ET, in order 90% of the usefulness of the FET to be achieved.

The iron in the tablets was easily adopted, as a bivalent-chelated. The satisfactory results were also due to the synergistic action of RJ, propolis, and the herbal remedies from the Proherbis composition. After 10-14 days the control blood picture has showed highly satisfactory results and improving of the all important parameters. The most positive effect of the treatment was shown with the level of Fe, ferritin and Er, while Hb was later normalized. In this treatment, the RJ has cleaned the periferic blood from the iron and has filled the reserves, i.e. it has increased the level of the marker ferritin.

On the Figures 1 and 2 are shown the positive results obtained in treatment of sideropenic anemia increasing the iron level, RBC and Hb with women.

Effect on hypothyroidism

Hypothyroidism is a condition when the thyroid gland does not produce sufficient amount of thyroid hormones [17]. A great number of patients who were diagnosed with subclinical hypothyroidism were advised to make a complete laboratory examination, and after detailed analysis, minor changes into the overall health condition could be noticed, such as the mild sideropenic anemia, low immune system due to a stress, tiredness, minor increasing in the prolactin level and an increase in the TSH level. In cases of subclinical hypothyroidism, the patients can have normal level of circulating thyroid hormones. However, the TSH level is higher than usual, which means that the thyroid gland needs additional stimulation so as to produce an appropriate amount of hormones. Most of these patients progress into cases with hyperthyroidism. The Golden Bee products were recommended to the patients for normalizing and maintaining the

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| Tablet | Ingredients | Effects | Dosage | Action/Recommendation |
|--------|-------------|---------|--------|-----------------------|
| C      | 10 mg of lyophilized royal jelly+200 mg of vitamin C | Raising specific and nonspecific resistance of the organism, neutralization action of free radicals, increasing the process of detoxification, prevention viral and bacterial infections | 20 effervescent tablets enough for 4 litres of drink | Strengthening of the immune system and prevention of viral and bacterial infections, helping the rehabilitation process of chronic and subacute viral infections (herpes, hepatitis), and healing wounds and breakages; increasing the detoxification process, reducing the consequences of smoking, alcohol using and strong medications; it is the first aid in the cases of fatigue, acute stress and exhaustion; it is especially recommended to people who live in big cities and who are exposed to chronic stress and air pollution; suitable for children prone to desease and those who progress slowly. |
| Fe     | 10 mg of lyophilized royal jelly+10 mg of bivalent chelated iron+100 mg of vitamin C | Providing daily and increased need for iron (up to 90% of absorption), preventing and curing anemia, fast adoption without difficulties | 20 effervescent tablets enough for 4 litres of drink, 1-3 tablets for daily intake | It is suitable for children and pregnant women, as well as sportmen showing the effects in a couple of weeks during a regular usage, increasing the energy and vitality; helping also in cases of fatigue, concentration lacking and weakening of the immune system. |
| Ca     | 10 mg of lyophilized royal jelly+500 mg of calcium carbonate+20 international units of vitamin D3+100 mg of vitamin C | Osteoporosis prevention, helping the bone and teeth growth and development, eliminating allergy difficulties, function regulation of hypophysis, thyroid and other endocrine glands, prevention of viral and bacterial infections | 20 effervescent tablets enough for 4 litres of drink | Easier calcium absorption and assimilation, resulting in bone strengthening and density increasing; treatment of breakages, allergy problems and conditions of overall body weakness and exhaustion; in nutrition for growing and developing of children, pregnant and nursing women, sportmen, and in cases of intensive wearing out. |
| Zn     | 10 mg of lyophilized royal jelly+10 mg of chelated zinc+100 mg of vitamin C+balm leaves extract | Regulation of metabolism and prostate function and fertility, providing powerful detoxification, strengthening the body immune system and mental functions | 20 effervescent tablets enough for 4 litres of drink | In increasing a number and mobility of sperm's cells and maturation of oocytes; in glucoregulation and regulation of lipid status of diabetics, cholesterol and dyslipidemia, in depression treatment, affecting the neurological system, stimulating the sense of taste and smell, encouraging the mental functions, for children’s physical and mental development, for sportmen, and for soothing zinc by sweating, in synthesis of testosterone which is directly responsible for strength and growth of muscles, in nutrition of those who work or live in environment polluted air, protecting the organism against heavy metals and other pollutants. |
| Se     | 10 mg of lyophilized royal jelly+25 mg of selenium+10 mg of vitamin E+100 mg of vitamin C | Neutralization of harmful effects of free radicals, prevention of occurrence of chronic degenerative diseases (cancer and arteriosclerosis), prevention of viral and bacterial infections | 20 effervescent tablets enough for 4 litres of drink | Cancer prevention and strengthening of the immune system, reducing difficulties caused by cytoplastic therapy and radiation; improving the mood and mental abilities; slowing down the ageing process and deterioration of neurons; helping in improving of concentration, memory and other cognitive functions; protecting the brain cells against stress, pollution and toxic substances from the environment; increasing the most productive life period duration. |
| Kardio| 10 mg of lyophilized royal jelly+2.5 mg of antioxidants from blueberry+150 mg of magnesium+vitamin E and vitamin C | Strengthening the heart muscle and elasticity of the blood vessels, reducing the risk of heart attack and stroke, reducing the high blood pressure, cholesterol and triglycerides' level regulation, blood clot prevention | 20 effervescent tablets enough for 4 litres of drink | In prevention of heart attack and stroke, in improving the elasticity of the blood vessels, in regulation the high blood pressure, improving the balance between LDL and HDL (“good” and “bad” cholesterol), regulation of the blood lipid levels and in prevention of blood clot, decesing the using of medicaments increasing the body physical and mental strength; in helping the patient treatment in post heart attack period preventing for another one. |

Table 1: Various kinds of royal jelly products-effervescent tablet (shumleta), their composition, synergistic health effects and mutual action with vitamins.

TSH normal level [17]. At the beginning, they were advised to take higher daily doses of royal jelly of 300-360 mg, or 10 to 12 ETs with lyophilized royal jelly together with several drops of ProHerbis in a glass of water. The aim of the treatment was to apply the experience of synergistic salutary effects of the royal jelly combining it with propolis, vitamins, oligoelements and herbal remedies.

Figure 3 represents the study on a representative case of a 35-year old woman who had an elevated TSH level at the beginning of the treatment, while her FT4 was at the bottom referent value and her echo findings demonstrated symmetric lobi and a homogenous and normal-size thyroid gland. After the achievement of good results during the treatment with RJ, the amount of the royal jelly consumption was halved and the patient was taking only 6 ETs per day. After 4 months treatment, she got pregnant. The 3.06 TSH level maintained the same value. However, the Golden Bee team was awarded that the pregnancy itself would lead to an increase of the TSH level; hence the number of tablets was increased. At the last health control of the patient being in the 6th month of pregnancy, it was shown a 1.92 TSH level.

**Effect on benign prostatic hyperplasia (BPH)**

The prostatic hyperplasia has to be considered as a part of aging, and there are over 100 million men suffering from BPH worldwide today. Benign prostatic hyperplasia can seldom cause problems after the age of 40, while it most frequently appears as a problem when men reach their 60s, an age when in 50% of the cases the prostate increases in size, and even 90% of men in their 70s and 80s they have that problem [18]. The tests which used are the following: digital rectal touch, PSA, free PSA, PAP, ultrasound findings, cystoscopy and biopsy [19].

During many years of administering the Golden Bee products, over a thousand patients were diagnosed with benign prostatic hyperplasia whose functioning markers and changes to the prostate were increased.

Therapies were administered to every person individually [20]. To some patients, at least 6 Zinc ETs and 3 Selenium tablets combined with a solution mixture of propolis and ProHerbis herbs were administered on daily basis. The other were recommended to combine only zinc
tablets and the ProHerbis product [17], while some were advised to take only Zinc tablets.

The patients were advised to take intensively the Golden Bee products at least two months, and afterwards, to decrease the dose depending on their marker and ultrasound findings, taking them only as prevention. Dysuric disorders were alleviated after only several days of the products usage, while the decreasing of the marker level tablets was progressing. The time required for the marker normalization depended on their initial levels, and it was usually about two months. Figure 4 represents the synergistic effect of the RJ products on prostatic hyperplasia (BPH).

**Effect on systemic lupus erythematosus (SLE)**

Systemic lupus erythematosus (SLE) is a systemic autonomous disease upon which the immune system became hyperactive and fail...
to make a difference between antigen and its own organism, thus ‘attacking’ the normal, healthy tissues and organs [21]. SLE appears at 1 out of 2,000 women, mainly at a younger age.

Another study of a representative case was of a girl born in 1991 diagnosed with SLE-lupus glomerulonephritis which is presented on the Figure 5, showing her medical condition which was diagnosed on the base of: arthritis, pericarditis, anemia, glomerulonephritis with a beginning stage of kidney insufficiency and hypertension (200/120mm/Hg), with positive ANA findings, antids DNA, anti Ro, low C3 and C4 values, positive CRP, leucocytosis with high SE level. In addition to this, all the kidney results were pathological: urea 9.8, creatinin 124, creatinin clearance 50 ml/min and proteinuria 9.8g/24h. Since her health was deteriorated, she was hospitalized for two weeks.

The therapy administered by rheumatologists, immunologists and nephrologists consisted of Urbason and Endoxan infusions, beginning in September 2009, at the Military Medical Academy in Belgrade. The patient took Lasix, Plaqenil and Controloc pills every day. Taking into regard the seriousness of her situation and in order to mitigate the side effects of the cytostatics, the patient was recommended to take ETs with RJ in combination with ProHerbis drops from the very beginning of her hospitalization. Large doses of RJ were administered (450 mg/day), which were equal to 15 ETs, as well as large amounts of ProHerbis (30 drops 6 times per day). A usual recommendation was taking of Fero and C ETs because of the anemia, which was combined with Selenium, Cardio and Calcium ETs, except of the Zinc ETs tablets because of their inappropriate effect upon the autoimmune disease.

Gradually decreasing of the TSH level of the thyroid gland hormone in a 280-day treatment: TSH level of 18.44 at the beginning of the treatment After a period of 30 to 35 days, the TSH level dropped by half at 9.69, and after 70 days of the usage of the royal galley products, the TSH reached a normal level of 3.94.

**Figure 3:** Synergistic effect of the royal jelly products in hypothyroidism treatment.

The basic PSA marker level was over 4.1 ng/ml. In addition to an increased PSA level, there were also patients with an increase of their PAP above the upper normal level > 3.5u/L. During a 50-day treatment the marker levels were normalized.

**Figure 4:** Synergistic effect of the royal jelly products in treatment of benign prostatic hyperplasia (BPH).
The patient’s fully commitment to the treatment recommendations resulted in improving her condition in month by month. The applied therapy consisting of pulsed dosing with Urbason and Endoxan along with the regular medical therapy gave also positive effects. After 9 months later of taking doses of Urbason and Endoxan, the doctors reported that there were no any clinical signs of active disease and since May, 2011 she was taking the infusion therapies much more rarely—every three months. As the situation was improving, the number of effervescent tablets was decreasing.

During the last 15-year period the Golden Bee scientific and medical team has proved the synergistic effect of the royal jelly on the human organism in prevention, prophylaxis and treatment through laboratory and clinical investigations which were conducted on 500-1000 patients from each medicinal area and prevention was undertaken of above 100 000 users originating from many European countries including Serbia, Macedonia, France, Czech Republic, Kosovo and other countries. Educational thematic lectures were also organized and performed in many cities in Macedonia in collaboration with Medical Chamber and Medicinal Association of Macedonia and Protehna, doo-Beograd with participation of a few thousand medical doctors.

Conclusion

Taking into account the all efforts done in a long period of applying the Golden Bee products based on the RJ in the field of prevention, prophylaxis and treatment of thousands patients and users in a few countries in the Balcan region, their positive and synergistic effects on each medical area concerning the health of the contemporary man were proved. Their extraordinary composition including the RJ, propolis, healing plants, vitamins and oligoelements, as well as the synergism in their action on the human body, suggest that they should not be used only for treatment diseases, but they should be also present in the everyday nutrition of the population, with an aim to keep the health in a good condition.

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