

Apitherapeutic Heritage – Application and Innovation in the Spa and Wellness Industry of Bulgaria

Mariana Angelcheva

Tatyana Tomova

National Sports Academy 'Vassil Levski'

Abstract: The article draws attention to understanding apitherapeutic heritage and the opportunity to include honey and bee products in prevention practice and therapy activity, as well as to the prospects for development of wellness education in this country. Characteristics of some of the main bee products and methods of their application are presented. Digitally presented innovations and good honey practices in the Bulgarian certified SPA and Wellness Centers and the Sofia massage studios were analyzed.

Keywords: apitherapy technics, digital presentation, certified Spa and Wellness Centers, wellness education

Ключови думи: апитерапевтични техники, дигитална презентация, сертифицирани спа и уелнес центрове, уелнес обучение



Mariana Angelcheva, PhD, is a full-time Chief Assistant Professor at Kinesitherapy and Rehabilitation Department, Faculty of Public Health, Healthcare and Tourism, at National Sports Academy 'Vassil Levski'. She is member of the Bulgarian Medical Association.

E-mail: angelcheva_dr@abv.bg

Tatyana Tomova, PhD, is full time Chief Assistant Tayana Tomova in the Department of Sports Medicine, sector Sports Massage at the Faculty of public health, health care and turism at the National Sports Academy 'Vasil Levski'.

E-mail: tomova.tatyana@abv.bg

INTRODUCTION

I. BEE PRODUCTS FROM ANTIQUITY TO THE PRESENT DAY

Bee products take up an important room in medical treatment and prevention practices of Bulgarians from antiquity till today. Apiculture has been known since ancient times when man initially used honey and wax, and subsequently turned on beesvenom, propolis, royal jelly, bee pollen, perga, turtium jelly (apillarville), direct bee stinging and carcasses. Empirical knowledge was sufficient to appreciate the great wealth brought by these hardworking and cooperative insects and to take greater care of them in order to increase their number.

The interest in apiculture is not limited only to the bee products, but also to bee role as pollinators of entomophilic plants. The bees contribute a lot we to get fruits and seeds of higher quality. Without melliferous bees, millions of tons production would be lost per year due to insufficient and bad quality plant

Let your medicine be your food and your food be your medicine
Hippocrates, c. 460-377 BC



Picture 1. Bee products
Иллюстрация 1. Пчелни продукти

pollination, disrupting ecological balance in nature, with serious effects on humans. Currently, bee products are used by humans as food, for dietary nutrition, prevention, medical treatment, in cosmetics and other industries.

ROYAL JELLY is made by nursing bees to feed maggots. Its composition includes: proteins; fats; carbohydrates; vitamins—B, PP, H, C, A, D, E; amino acids; enzymes; hormone-like substances; macro- and micronutrients, etc.; it has a pronounced antimicrobial effect, due to its acidic pH-3.6^{1,2,3}. This full-fledged bee product is useful not only for the bees, themselves, but also for the man. It is suitable to be used as a general strengthening agent in case of physical weakness, being slow in sexual development, premature aging, to strengthen immune system and protect against atherosclerosis.

APYLARVILLE (tartium jelly) is obtained from the fresh brood of drones and consists of proteins, fats, indigestible cellulose, amino acids, vitamins, glands secretions, hormones, minerals, trace elements, etc.; nutritional value of 1 – 2 kg of tartium jelly is equal to 10 kg of honey or 1 kg of bee pollen⁴. Apillarville is got in May and June; the extraction, received from tartium brood, contains part of the larva, royal jelly, some small amount of honey and wax. It has a good healing effect in case of neuroses,

endocrinological, rheumatic and diseases during childhood⁵. This is a new research field.

BEE POLLEN is made from the flower pollen (male sex cells of plants), collected by bees to feed maggots and supply the glands producing royal jelly; it is of paramount importance for the life and development of the bee family; not by chance, it is called 'bee bread'. It contains: proteins, 20 amino acids, sugars, mineral substances, vitamins, hormones, aromatic substances, water, etc.⁶ Researches show 100 g of bee pollen has amino acids, as much as 500 g of meat or 7 eggs, so 2 soup spoons with bee pollen can satisfy the needs of an adult human for amino acids⁷.

PROPOLIS is a resinous substance produced by the workers in the bee community, it ensures absolute purity in the beehive. It has a pleasant scent of poplar buds, honey, wax and vanilla, a bitter taste, and is sticky to the touch. Ingredients: mixture of resins (55 %), waxes (30 %), ethereal oils (10 %), bee pollen (5 %), enriched with ferments and put to lactic acid fermentation in the digestive tract of the bee; the mineral substances that are contained in honey and bee pollen are detected in the propolis as well with the help of spectral analysis; however, their percentage is higher; it consists also of vitamins of group B, A, C and E and a relatively

¹ Pochinkova 1986: 117-127.

² Mladenov 1989: 90-96.

³ Vassilev 1990: 8-9.

⁴ Vassilev 1990: 11-12.

⁵ Pochinkova 1986: 128-129.

⁶ Pochinkova 1986: 105-112.

⁷ Vassilev 1990: 9.

high content of zinc and manganese^{8, 9, 10}. This bee product has a strong antibacterial, antiviral, antimycotic and antiparasitic effect.

BEESVENOM is a colorless, thick liquid with a specific smell of honey and with a bitter burning taste, it has acidic reaction (pH of the aqueous solution – from 4.5 to 5.5) and is heat-resistant; in dry form the beesvenom can be stored for years without losing its toxic properties. It is produced by some special bee glands and through their stings is introduced into the body of the enemy. The beesvenom contains apamine, melitin, ten groups of phospholipases and hyaluronidase^{11, 12, 13}. It has anti-inflammatory, radioprotective, anticoagulant, antimicrobial action. This bee product is suitable for treatment of rheumatic diseases in athletes, spondylos, diseases of peripheral nervous system¹⁴.

BEESWAX is produced by the wax bee glands. It is pleasantly smelling of honey, burns with a luminous flame and could be easily mixed with fats and oils in a homogeneous mass. Its composition includes 15 different substances, which belong to the complex esters (70.4 – 74.7 %), free fatty acids (13.5 – 15 %) and saturated hydrocarbons (12.5-15.5 %); aromatic and mineral substances, melitic acid, propolis, bee pollen, etc.; vitamin A – in 100 g of honey-comb wax contains 4096 IU vitamin A, while 100 g of beef meat contains 60 IU¹⁵. It has anti-inflammatory effect and is used to cure wounds, arthritic diseases, inflammation in the oral cavity¹⁶. Used in the cosmetics, it improves the skin elasticity, gives a fresh and smooth air to it.

HONEY is among the most affordable bee products and it occupies an important room in nutrition, dietetics and as remedy for many diseases. The wide spectrum of its efficacy is due to its rich composition, that includes carbohydrates – mainly monosaccharides (fructose and glucose) – 75 – 80 %, and disaccharides (sucrose) – 5 – 10 %; water; vitamins of group A, B, K, C and E; enzymes; minerals; macro- and micronutrients; 17 amino acids; proteins and nitrogenous substances; alkaloids; essential and aromatic compounds; phytoncides, etc.¹⁷ Pharmacological properties of honey include: antibacterial, protistocidal and antimycotic effects; hyposensitizing (antiallergic) and anti-inflammatory efficacy; hemopoietic (blood-forming); expectorant influence; diuretic effect; it helps child's body to absorb calcium in a more effective way; it has also regenerative (restores damaged cells and tissues); cardiogenic (stimulates the heart); painkilling and neurotonic effects¹⁸. Literature sources inform that the healing honey application as in respect to its antimicrobial efficacy is often reduced mainly to some external treatment procedures. It has been proven experimentally that under the gastric and duodenal juices influence it loses some of its antimicrobial properties, and more fully is absorbed through the skin¹⁹. Maybe, because of this, it was mainly used externally for a long time by both, folk and scientific medicine. One of the oldest methods, externally applied, is honey massage. It helps the tissues to be affected in-depth, and through the skin pores the long-time accumulated waste substances^{20, 21, 22} to be extracted from them.

⁸ Pochinkova 1986: 56-64.

⁹ Mladenov 1989: 99-105.

¹⁰ Vassilev 1990: 9-10.

¹¹ Pochinkova 1986: 16-22.

¹² Vassilev 1990: 10-11.

¹³ Mladenov 1989: 81-89.

¹⁴ Pochinkova 1986: 23-28.

¹⁵ Mladenov 1989: 97-98.

¹⁶ Pochinkova 1986: 86-89.

¹⁷ Mladenov 1989: 42-51.

¹⁸ Mladenov 1989: 73.

¹⁹ Mladenov 1989: 73-74.

²⁰ Filonov 2015: 228-232.

²¹ Harnish 2001: 47-51.

²² Lisovski 2009: 108-109.



Picture 2. SPA products
Иллюстрация 2. СПА продукти

The healing effects of honey massage include:

1. Detoxifying and anti-cellulite effect

Due to some 'pumping' movements, blood flow in skin and subcutaneous tissues increases. Biologically active honey substances penetrate deeply through the skin and affect the whole organism²³; Through the reflex areas of the body back, honey massage stimulates activity of the organs, associated to these zones²³. It improves cell oxygen saturation, stimulates opening-up of subcutaneous fat depots, frees the body from the heaped up slags and toxins²⁴. These specific features make this massage a part of the complex anti-cellulite therapy^{24, 25}.

2. Honey facial massage for radiant skin

Honey face massage for no more than five minutes once a week restores and improves skin structure and elasticity. Honey massage achieves the fine peeling effect; the skin becomes soft, smooth and clean, the dead epithelial cells are eliminated. This massage removes the superfluous oiliness and nourishes dry and exhausted skin.

3. Honey massage in combination with steam bath and sauna

After sauna and steam bath, biologically active honey substances are absorbed much more efficiently by a cleansed and breathable skin, and hence by the whole organism²⁶.

II. DIGITAL PRESENTATION OF APITHERAPY PROCEDURES

II. 1. AIM:

In the SPA and WELLNESS industry, external application of honey is getting more and more popularity. The National Tourist Register lists the certified centers according to Ordinance No 04-14 of October 9th, 2019 on the terms and conditions for certification of the 'Balneological (Medical SPA) Center', 'SPA Center', 'Wellness Center' and 'Thalassotherapy Center'. This current study is focused on SPA and Wellness innovations and good honey practices, demonstrated in the digital presentation of 77 SPA centers and 23 Wellness centers, included in the mentioned Register and 117 massage studios Sofia City.

²³ Harnish 2001: 47-51.

²⁴ Rossi 2000: 251-262.

²⁵ Tomova 2022: 88-93.

²⁶ Goranova et al. 2000: 22-26.

II.2 RESULTS AND ANALYSIS

The analysis of the results of our study are as follows (**Fig. 1**):

1. In the 19 active digitally presented and certified Balneological centers in the country honey therapy is not offered.

2. 27 of all 77 digitally presented certified and functioning SPA centers in the country, offer various honey procedures.

3. No such service is offered in other 27 spa centers.

4. Digital applications of some 23 SPA centers, do not present enough information.

5. Only six of the 23 specialized and certified Wellness Centres offer some diversity of honey procedures.

6. No thalassotherapy centers registered.

7. Only four of 117 massage studios in Sofia apply honey massage.

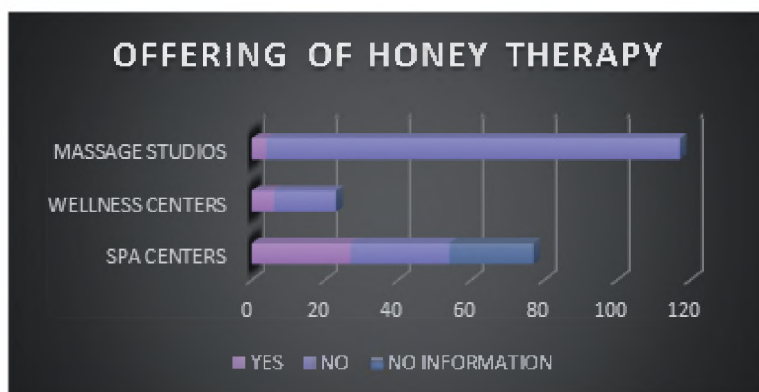


Figure 1. Offering of honey therapy
Фигура 1. Предлагане на процедури с мед

There is an impressive great diversity of honey therapies promoted by the digital applications of the 27 SPA centers. The most often recommended stand-alone honey procedures are (**Fig. 2**):

- Back massage with honey
- Anti-cellulite honey massage

➤ Back massage with natural honey and warm compress (30 min.)

➤ Antioxidant honey therapy (peeling, mask, massage)

➤ Antioxidant honey facial therapy

➤ Detox massage with honey and honey oil

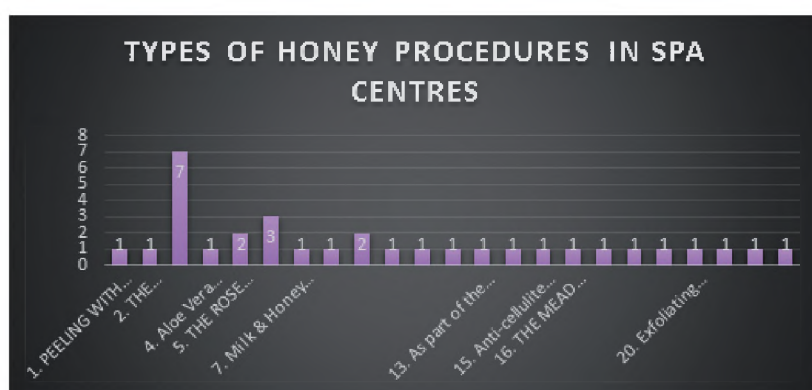


Figure 2. Various types of honey procedures at the SPA Centres in Bulgaria
Фигура 2. Видове процедури с мед в СПА центрове в България

Predominant is the offer of various **combined** honey spa treatments (**Fig. 2**):

- Peeling with honey and coffee of the whole body in a Turkish bath hammam;
- Roman massage with honey and milk;

➤ Whole body peeling with honey and milk;

➤ Aloe Vera massage with aloe vera extract, almond oil and natural honey;

➤ Back massage with honey and essential oils of pine and juniper; and relaxing massage with

warm pine and thyme oils;

➤ *Honey therapy – anti cold and flu therapy – to cleanse respiratory system and stimulate body immunity. Honey mask + herbal mineral bath (seasonal offer);*

➤ *Detox therapies with honey, Bulgarian rose and yoghurt;*

➤ *Anti-cellulite massage with honey /therapy with honey and orange extract / – 50 min;*

➤ *Massage with honey and chocolate.*

Interesting combined SPA rituals with honey are offered (Fig. 2):

➤ *RHODOPE LONGEVITY RITUAL – bath with honey and milk, for two persons. Body exfoliation, for two persons. Partial massage for her. Bed therapy with semi-precious stones for him;*

➤ *ROSE GARDEN Therapy ends with a relaxing massage using a new generation massage*

gel, containing rose petals, rose oil and honey extract, with nourishing and moisturizing effect;

➤ *MEAD RITUAL – Whole body relaxing massage with wine and honey; it nourishes, softens, regenerates, stimulates collagen synthesis and improves skin elasticity and tone. Honey, combined with warm wine, visibly improves and moisturizes even the driest skin, helps to solve acne problems of the skin;*

➤ *CLEOPATRA'S RITUALS (peeling, bee massage and mask Honey and Milk).*

In the digital applications of Wellness Centers, the procedures are most often offered as **independent or stand-alone** (Fig. 3):

➤ *Back massage with honey;*

➤ *Honey therapy – 60 min.*

Combined

➤ *Massage with natural honey and oils as a detoxifying procedure.*

➤ *Honey and chocolate therapies*

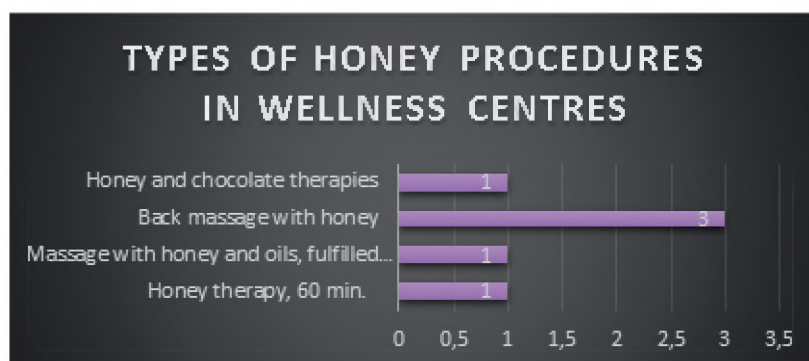


Figure 3. Various types honey Wellness procedures

Фигура 3. Видове процедури с мед в Уелнес центровете

The digital applications of Sofia City massage studios offer as independent (Fig. 4):

➤ *Honey massage as anti-cellulite therapy, and*

➤ *The healing honey massage of the back is applied only in one studio.*

Combined

➤ *Massage with natural honey and essential oil.*

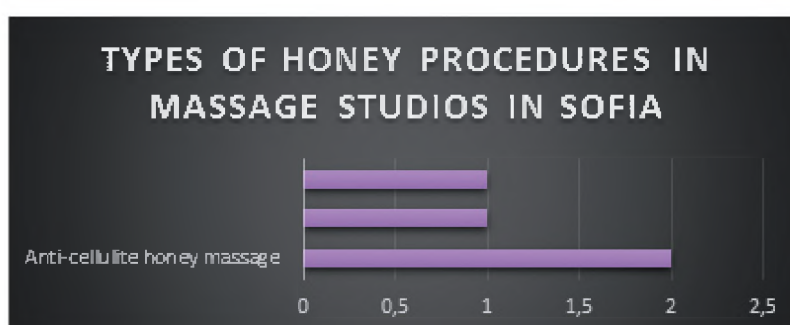


Figure 4. Different honey procedures offered at the massage studios in Sofia City

Фигура 4. Видове процедури с мед в масажните студия в град София

II. 3. DISCUSSION

The results obtained, allow to deduce the following more important generalizations and trends:

1. The analysis of Internet information in the digital applications of some certified centers shows honey procedures occupy a significant room in the Bulgarian SPA centers; however, they are less represented in Sofia City wellness centers and massage studios in Sofia.

2. It is noteworthy, practitioners are imposing as tendency both services – independent, i.e. stand-alone, and combined rituals and concepts based on Bulgarian products – honey, wine, milk, rose oil and herbs.

II. 4. OUTCOMES

1. The offered SPA and WELLNESS rituals combining honey and essential oils, wine, milk and herbs are an alternative to combat daily and professional stress.

2. A combination of them with other procedures from the Thermo-zones, enhances their detoxifying effect, takes away pain, fatigue, improves metabolic processes, and slows down aging.

3. Offered in a suitable atmosphere that combines flavors, quiet music and natural landscapes, various SPA and WELLNESS honey rituals restore the vital energy and psycho-emotional balance of the individual.

BIBLIOGRAPHY:

Filonov 2015: Filonov, Sergei. Лечение на организма със собствени сили. [Lechenie na organizma sas sobstveni sili]. Sofia.

Goranova et al. 2000: Goranova, Zoya, Markova-Stareishinska, Gergina, Kraidjikova, Leila. Масаж. НСА. [Masaj. NSA]. Sofia.

Harnish 2001: Harnish, Gunther. Лечебен масаж с пчелен мед. [Lecheben masaj s pchelen med]. Ed. Akvarius, Sofia.

Lisovski 2009: Lisovski, Petar. Прочистване и подмладяване. ISBN: 978-954-792-278-5. [Prochistvane i podmladyavane]. Sofia.

Mladenov 1989: Mladenov, Stoimir. Пчелните продукти – храна и лекарство.

II. 5. RECOMMENDATIONS

1. A professional qualification in SPA and Wellness therapy is needed for specialists who are now involved in this field, in order they to conduct, properly and effectively, the treatment procedures.

2. To increase knowledge, skills and specialized academic training in the field of honey healing practices is necessary.

3. Prevention of socially significant state of affairs – characteristics and opportunities for prevention with the help of SPA and Wellness therapies.

4. Individual diagnosis and application of effective massage techniques according to the functional status of each single person.

III. CONCLUSION

Bulgaria is a country, rich in natural resources – mild climate, mineral waters, medicinal plants, oil-bearing rose, healing mud, wonderful varieties of wines, Bulgarian yoghurt and bee products. Natural products and resources, combined with a creative approach to the development and presentation of rituals and specific massages supporting them, is an important condition to transform this country into a wonderful SPA and Wellness destination and niche tourism.

Медицина и физкултура. [Pchelni produkti – hrana i lekarstvo]. Sofia.

Pochinkova 1986: Pochinkova, Pavlina. Пчелните продукти в медицината. Издателство на Българската академия на науките. [Bees products in medicine]. Sofia.

Rossi 2000: Rossi, Ana Beatris R. Cellulite: A Review. Journal of the European Academy of Dermatology and Venereology, No 14 (4), 251-262. DOI:10.1046/j.1468-3083.2000.00016.x

Томова 2022: Томова, Tatyana. Традиции и иновации в мануалните въздействия за Рекреация и Уелбийнг. Лечебен масаж с пчелен мед при целулит. – НАУЧНИ

ИЗВЕСТИЯ – БЮЛЕТИН „НАСЛЕДСТВО БГ“, ed. Emmanuel Moutafov, 2/2022, Година II, брой 3, ISSN (Print): 2815-3138 // ISSN (Online): 2815-3316, [Traditions and innovations in the manual impacts in Recreation and Wellbeing. Lecheben massaj pri celulit], 88 – 93.

Vassilev: 1990, Vassilev, Vasil. Съвременно състояние и перспективи на апитерапията. – Сборник с доклади от Първата научна конференция по апитерапия. София [Savremenno sastoyanie i perespektivi na apiterapiyata. In: Sbornik s dokladi ot Parva nauchna konferencia po apiterapia], 8 – 11.

Апитерапевтично наследство – приложение и иновации в спа и уелнес индустрията в България

Мариана Ангелчева, Татяна Томова

Статията насочва вниманието към осмисляне наследството и възможностите за приложението на мед и пчелни продукти за профилактика и терапия, перспективи за развитие на уелнес образованието. Представени са характеристиките на някои от основните пчелни продукти и методите за тяхното приложение. Направен е анализ на дигиталното представяне на иновации и добри практики с пчелен мед в сертифицираните спа и уелнес центрове в България и масажните студиа на територията на София-град.

