

## Apitherapy Products for Medicinal Use

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For the past ten years, beekeeping has increased due to increased awareness of the disappearance of the bees since Colony Collapse Disorder. Most of the disappearance of honey bees can be attributed to the use of pesticides. Apitherapy is the science and art of maintaining health with the use of the products of the honeybee hive. These products are honey, bee pollen, propolis, royal jelly and bee venom. I have been beekeeping for the last 10 years. I use every product of the beehive for self and patient use.

### Historical Aspects

Beekeeping is not new to civilizations. Humans started collecting honey from bees approximately 9000 years ago. A rock painting found near Valencia, Spain dating from 7000 B.C shows a man gathering honey. Drawings on Egyptian Temples built about 2400 B.C. show bee keeping and honey preparation. In the oldest medical papyri of Egypt, dating back to 1553-1550 B.C, there are indications that honey was used to heal wounds [1].

Ancient writings including the Talmud, the Bible, scrolls from the Orient, ancient Greece and Rome all praised honey and bee pollen as a source of youthfulness and health. Different cultures have used honey. The Koran in a section titled "The Bee" says honey is a "medicine for men" In the Orient a mixture of honey and pollen was used as a poultice on wounds and as a health tonic. In India the tonics prescribed 'to give pleasure' and 'to preserve youth' were mainly prepared from honey. A diet in which honey and milk were the main items was thought to prolong life [2].

The great scholar and physician, Hippocrates wrote "honey and pollen cause warmth, clean sores and ulcers, soften hard ulcers of the lips, heal carbuncles and running sores". Historically, Alexander the Great in ancient Greece was treated with bee stings for hip pain and Charlemagne, the "8th" Century conqueror was cured of gout by bee stings [3]. The use of bee venom therapy was discussed in 1858 in C.W. Wolf's book, *The Poison of the Honey Bee*, which is considered a therapeutic agent.

### Bee Venom Therapy (BVT)

Most individuals know about honey and bee pollen. Few know about bee venom therapy. Bee venom therapy has been used to treat rheumatoid arthritis for centuries. Charlie Mraz a beekeeper from Vermont started treating people with arthritis and pain in the mid 1930's with live bee stings. He learned about bee venom therapy from a New York physician, Bodog F.Beck, author of *Bee Venom Therapy*, who was treating arthritis with bee venom [4]. C.C Miller, a physician gave up his practice to raise bees and wrote a book, «Fifty Years of Beekeeping» Bee venom therapy, either by using a live honeybee or by a transdermal injection has been used to treat Multiple Sclerosis for decades. There is documentation of the beneficial aspects to the patient, the regression of symptoms and decrease in progression of their disease. There are more than sixty identifiable components in bee venom. Most of the bee venom components are anti-inflammatory, antimicrobial and act as antioxidants [5,6]. There are many other conditions where bee venom has been used as arthritis, [7] post herpetic neuralgia, [8] and adhesive

capsulitis [9]. I have used bee venom therapy for my own autoimmune condition by using live honeybees administered by an acupuncturist.

### Propolis

The next component of the bee hive that individuals know have limited knowledge is propolis. Propolis is primarily composed of resins collected by the bees from trees and plants. All propolis is not the same and changes with the type of plant, climate, soil and season. This sticky substance which acts like a cement to hold the hive together has medicinal properties. It contains over 180 components which contain waxes 10-35%, essential oils 6-10%, pollen 5%, minerals as Mg, Ca, I, Na, Cu, Zn, Mn, Fe, vitamins such as A, B1, B2, B6, C, E, and enzymes. Propolis has been used for the pharynx in the following conditions: acute & chronic gums erosions, denture soreness, plaque gingivitis, and periodontal disease [10]. It has been studied and research for radiation protection as well as tissue regeneration. Propolis has antibacterial, antiviral, [11] anti-parasitic and anti-cancer properties. I have used propolis to treat external warts, [12] otitis media [13] and autoimmune diseases, especially psoriasis [14]. More individuals should be using propolis every day.

### Bee Pollen

Next spring notice the bees in your neighborhood. It is important to notice their bodies carrying the pollen. This bee pollen can be consumed by you on a daily basis. Bee pollen is a nutritious high quality food. I might even say it is a super food. It can be used as an anti-depressant, an appetite modulator as well as increased endurance in sports activity. In fact it also improves functions of brain, heart liver, and prostate. It contains all the necessary nutrients for humans as proteins, free amino acids, greater than 200 enzymes and sugars. Both Propolis and bee pollen have similar nutritious value. Bee pollen contains over 50% more protein than beef and is an excellent vegetarian source of protein typically possessing more of the essential amino acids, pound for pound, than animal proteins like meat, eggs, and dairy product. It has been studied as an effective dietary lifestyle. It is effective for cardio-vascular diseases such as hypertension. I find it effective for digestive issues and ask my patients to consume one teaspoon per day. It is used for both constipation and diarrhea. I have effectively used it in anorexia to maintain good nutritional status. I usually recommend it for all my patients with autoimmune disease especially thyroiditis, multiple sclerosis, [15] lupus and celiac disease. It has been studied in benign prostatic hypertrophy, [16] memory loss, and cancer. Pollen is

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also protective against radiation. It is a powerhouse in my armentarium of supplements.

## Royal Jelly

Royal Jelly is a costly therapy, but worth its weight in platinum. I have used it as an antibacterial and antifungal agent. It is excellent for wound healing and tissue repair. I consider it the primer of the immune system. I use it to regulate hormones as well as improve cognitive function. I have even used it in osteoporosis. As a cardiologist, I was impressed by the use of royal jelly in decreasing the lipid levels in both animals and humans [17].

## Honey

The final apitherapy product most known is the golden liquid, Honey. Honey varies in taste and color based on the geographical region it originates from. Many individuals use it for allergies, but the honey must be from your local region. Manuka honey from Australia would not be effective for your local allergies of the Northeast coast of the United States. Yet Manuka honey is an excellent wound healing agent. Honey has both external and internal indications. I have used honey for external wounds, [18,19] and bed sores. It has antimicrobial properties and outstanding wound healing effects [20]. There are many published studies on wound healing and burn wounds [21]. It is useful for gastrointestinal diseases, as ulcers, and colitis. I also use honey as a natural cough syrup combined with elderberry flowers. It impressed me with its efficacy on coughs [22]. It is not just any honey. I would search for raw wild flower honey. I also would support your local beekeeper.

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