



®

Supplement to
The Art of Getting Well
Bee Pollen: The Perfect Food

Sources are given in references.

Authors of contributions/quotations are alphabetically arranged; major author, if any, is underlined.

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In the search for health one's attention is constantly drawn to the evolutionary aspects of man's nutritional needs, the so-called cave-man diet. Everyone knows that man did not have sugarcane during his stone age -- and probably the only direct source for fructose, sucrose and glucose was fruit and vegetables -- with the exception of nectar from flowers and its concentrate, honey from wild bees.

What I knew of bees and their importance to our health was virtually zero until a reading of Royden Brown's book, *How To Live The Millennium*, available through C.C. Pollen Company¹. It is clear that Royden Brown loves the products of the beehive as a hobby, a profession and, like some of us, a health nut! It is furthermore clear that Royden Brown has studied bees and their products personally, and also has had translated virtually all of the important scientific papers from every country in the world. I highly recommend that you purchase a copy of the above mentioned book for a more thorough reading. This chapter, therefore, will be limited to a generalized summary of Royden Brown's book -- of what I didn't know about bees and their products, and how those products can influence our health. The content herein and all quotes are used by permission of Royden Brown who also owns the copyright.

Background on Bees and Their Products

"Renowned healers of antiquity employed [honey, bee pollen, propolis, and royal jelly] . . . It was when the laboratories of the world community of nations confirmed that bee pollen contains all nutrients necessary in human nutrition that an efficient way to harvest bee pollen for the use of man became a necessity.

"In the course of her work, a pollen forager [the bee] will visit as many as 1,500 blossoms. A single granule of bee pollen contains from five hundred thousand to five million live pollen spores.

"Pollen is the male seed of flowers. It is required to fertilize the plant. The tiny particles consist of 50/1000ths of a millimeter

corpuscles, which are formed at the free end of the stamen. Every variety flower in the universe puts forth a dusting of *pollen*.

"Once a honeybee arrives at a flower, she settles on the stamen and nimbly scrapes off the powdery loose pollen with her jaws and front legs. She then moistens it with a dab of the honey she brought with her from the hive.

"When her baskets are fully loaded, the microscopic golden dust has been tamped down into a single golden granule.

". . . pollen . . . cannot be duplicated in a laboratory.

". . . raw honey in the comb is rich with pollen particles and bears little resemblance to the honey you find in the supermarket.

". . . , what was needed was a device of some kind which would dislodge a measure of the pollen as the bees enter the hive, while permitting the bees to retain a sufficient portion of the life-giving golden dust for the maintenance of the colony."

Royden Brown invented such a trap. "It is equipped with a series of scientifically-designed wire grids through which the bees must pass to gain entrance to the colony. As they make their way through the grids, approximately sixty percent of the pollen is gently brushed out of their pollen baskets. It falls through a screen into the pollen drawer situated beneath the trap.

"[The pollen trap] allows sufficient pollen to pass through the grids into the colony for the care and feeding of the hive population, and insures the harvesting of the driest, cleanest pollen possible. Moisture-laden wet pollen from low-lying humid areas ferments quickly, or develops mold. This type of pollen must be heat-treated immediately to preserve it for use. But high heat processing kills the enzymes and reduces the nutrient value considerably, transforming the pollen into a dead food.

"When bee pollen is improperly stored and handled, it will lose up to 76 percent of its nutritive value within twelve months. The only satisfactory method of preserving fresh, live bee pollen is flash-freezing at zero degrees to maintain hive-freshness indefinitely and to preserve all vitamins, minerals, and other nutrients intact. Allowing pollen to remain in the trap for as little as ten days results in nutrient loss or worse. Beekeepers who harvest for the C.C. Pollen Company are required to gather bee pollen two times per week. Each maintains a large chest-type freezer right alongside their honey extractors in the bee house. The C.C. Pollen Company mandates that all freshly gathered pollen be immediately flash-frozen in small batches.

"Honeybees have a flight range of twelve square miles and are masters at seeking out sources of pollen and nectar.

"The population of your hive will consist of one queen, approximately 20 to 100 thousand workers, and a few hundred drones.

"There are many bee farms in the U.S. which are maintained only for their honey production. Much of this honey ends up in the supermarkets as a refined liquid sweet with all the bits of pollen and propolis strained out. Unfortunately, only a true unrefined raw honey can be classified as a nutritive food. This type of honey is getting harder and harder to find. A few unrefined honeys still find their way into supermarkets, but health food stores are the place to be certain of finding this unrefined liquid gold, cloudy and rich with suspended bee pollen.

"The C.C. Pollen Company offers multiblended bee pollen harvested in environmentally-clean areas where man has not intruded with harmful chemicals, or polluted the surrounding countryside with the by-products of civilization, such as car exhaust and worse.

"Because it would be a disaster of huge proportions if the population of their hives were exposed to some of the dangerous agribusiness chemicals, migrating beekeepers are extremely careful

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to place their hives with farmers who use only harmless chemicals which pose no danger to the bees. The experts say the difference in yields in fields pollinated by the bees can amount to hundreds of millions of dollars per year across the U.S.

"This bit of amber [in the American Museum of Natural History] has been dated at 80 million years, but the bee preserved inside it may be much older than that. Chemical analysis indicates that the resin components which produced this amber actually came from a family of early conifers which proliferated in the Cretaceous period, from 135 million to 65 million years ago. The grand sequoia of today is a relative of those early pines."

Bee pollen will survive in a hard encasement that surrounds it for millions of years, and is often used to date archeological sites. This husk must be cracked for human usage. The C.C. Pollen Company developed a means for doing this without use of heat, chemicals, radiation or alcohol.

"Propolis is often called 'bee-glue.' Bees, then as now, collect propolis, take it back to the hive, mix it with flakes they secrete, and use it to chink up stray holes. Because propolis is the strongest natural antibiotic and disinfectant known, the bees also use it to insure that the interior of the hive remains hospital-clean. If a foreign object too large for the housekeeping bees to move contaminates the hive, it is coated with propolis and sealed off. This little bee [in the American Museum of Natural History] was undoubtedly on a propolis-gathering mission when she was caught and held fast in the sticky resinous sap of some ancient leafbud.

"... experts have long theorized that bees came into being at least 125 million years ago when flowering plants began blossoming in profusion. Bees and flowers are so dependent on one another for their very existence that the experts say they must have 'invented' one another. . . . Bees must have the carbohydrates they glean from the nectar present in the hearts of blossoms, as well as the proteins they require from the pollen they collect. Fossilized remains of pollen, leaves, and even flowers have been dated back to when dinosaurs ruled the land, more than 125 million years ago.

"... bees have changed very little in the past 80 million years.

"... we do know that primitive man not only fought the bees for their honey, but also feasted royally on the bee pollen stored in the comb and even ate the eggs and larvae. Aboriginal tribes still feast on bee grubs and still regard bee pollen and honey as well worth the price of a few stings.

"... every age has regarded the bee as benefactor of mankind and accords this little creature almost holy status.

"The Bible, the Talmud, the Torah, the Koran (the Code of Islam), along with the scrolls of the Orient, the writings of the ancient Greece and Rome, the legends of the Russian and Slavic people, even the relatively recent Book of Mormon (1830), all praise the industrious honeybee and her highly nutritious and healing products of the beehive.

"Hebrew scholars of the Torah, the Old Testament of the Christian Bible, say that early translators mistakenly used 'honey' in many scriptures in place of the more accurate phrase 'products of the beehive.'"

Royden Brown replaces the proper word in various biblical sentences, clearly making the meanings different when the words "pollen," "honeycomb," and so on are used, rather than the generalized inaccurate term, "honey."

The ecologists of today reckon that over 100,000 species of plants would die out and become extinct without the pollinating work of the bee. Without these plants, life as we know it, perhaps all life, would become impossible.

Health Benefits of Products of the Hive

"Writings over 2000 years old reveal that Egyptian physicians

called honey the 'universal healer'. In ancient China, honey was used to treat the victims of smallpox. The sticky stuff was smoothed over the entire body of the infected person. According to old records, this very contagious and disfiguring disease was stopped in its tracks and no pitting or scarring ensued.

"In light of present day scientific studies by the U.S. Bureau of Entomology showing that typhoid germs are destroyed in 48 hours and dysentery bacteria killed in less than 10 hours, when these bacteria strains are placed in a lab dish with a bit of raw honey, those oldtime healers were onto something big. Raw honey is rich with the bee pollen particles we now know are the true source of honey's remarkable healing powers. . . . British researchers at England's Norfolk & Norwich Hospital tried raw honey to treat infected wounds with notable success. In days of old, raw honey was often the treatment of choice for dressing battle wounds." [Raw honey also contains hydrogen peroxide which explains some of its anti-microorganism status, and may also contribute to some of the health effects, according to Walter O. Grotz.: Ed.]

Bee Pollen

Contents of Fresh Bee Pollen

(Percentage follows the ingredient in parenthesis.)

Amino Acids by dry weight: Arginine (4.4-5.7), Histidine (2.0-3.5), Isoleucine (4.5-5.8), Leucine (6.7-7.5), Lysine (5.9-7.0), Methionine (1.7-2.4), Phenylalanine (3.7-4.4), Threonine (2.3-4.0), Tryptophan (1.2-1.6), Valine (5.5-6.0).

Minerals by percentage of ash: Potassium (20-45), Magnesium (1-12), Calcium (1-15), Copper (0.05-0.08), Iron (0.01-0.3), Silicon (2-10), Phosphorus (1-20), Sulfur (1), Chlorine (0.8), Manganese (1.4).

Vitamins and Hormones in micrograms/gram: Thiamine (5.75-10.8), Riboflavin (16.3-19.2), Nicotinic acid (98-210), Pyridoxine (0-9), Pantothenic acid (3-51), Biotin (0.1-0.25), Folic acid (3.4-6.8), Lactoflavine (0.2-1.7), Alpha/Beta Carotene (A) (avg. 1.53), B₂ (16.3-19.2), C (152-640), D (0.2-0.6), E (0.1-0.32), Inositol (30-40), B₁₂ (avg. .0002).

Pigments: Flavoxanthine, Xanthophyll epoxide, Carotene, epiphasic Carotenoids, Flavonols, Ethylic Ether, Quercetin, Zeaxanthine, Lycopene, Crocetin, others.

Other Components: Water (3-4%), Reducing sugars (7.5-40%), Non-reducing sugars (0.1-19%), Starches and other carbohydrates (0-22%), Etheric extract (volatile fatty acids falsify the quantitative analysis of humidity beyond 70°C.) (0.9-14%), Proteins (7-35%), Free amino-acids (10%), Human Growth Hormone Factor (not measured), Hormones (gonadatropic estrogenic) (not measured), Rutin (not measured), Ash (1-7%).

Bee Pollen Miracles -- Testimonials

1. A young man had acne -- pimples and pustules -- for over five years. Tried everything without success until at last observed his brother who used 3000 mg per day. In just three days, brother's redness was almost gone. Tried it himself, and quit worrying about his complexion thereafter.

2. Middle aged man cleared up long-standing (7 years) San Joaquin Valley fever. Had tried everything. After three months of bee pollen condition cleared up at least 50 percent.

3. Forty year old woman suffered for years with serious depression. She could hardly function. After a week or so of fresh bee pollen granules, slept less. After two months, found depression gone and took long walks and did housework cheerfully. After one year on the granules, lost twenty-five pounds.

4. Twenty-eight year old, overweight by 67 pounds, easily tired, took granules for four months and started losing two to three pounds per week. No longer too tired to exercise, noticed personality changes becoming more outgoing and having more self-confi-

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dence; increased mental alertness, too.

5. Young woman of twenty-four suffered from hypoglycemia. Switched to an all-vegetarian diet and eliminated all types of sugars, including honey. Began taking bee pollen with breakfast. After two weeks noticed drastic improvement in symptoms. Another woman of thirty-eight, 20 pounds overweight, also with hypoglycemia changed from constant fear and depression to calm cheerfulness with energy.

6. Forty-seven year old diabetic at 257 pounds was diabetic. After taking insulin for five years, has not taken any now for five months. Also has not taken ulcer or arthritis medicine for one year.

7. Health-food store owner and her husband took two capsules of *Pollenenergy* per day at breakfast for two months. Stopped both of their snoring.

8. One person's colon infection cleared up on taking six caps per day for four weeks. Six months of doctoring could not kill the colon's bacterial strain.

9. One doctor says, "I give this honeybee pollen to all my patients. It is an excellent product. I certainly recommend it to my fellow physicians as the best of its kind."

10. Fifty-two year old man with atherosclerosis and blockage of heart chamber deemed inoperable, suffered stroke. Condition improved greatly after taking bee pollen.

11. Woman, late twenties, suffered numerous health problems: had stopped menstruating, lost hair, frequent headaches and backaches, fatigued, and sensitivity to cosmetics. On taking bee pollen had more relaxed feeling in her body, and in just days was sleeping better. After eight months on pollen began having regular menstrual periods for the first time in seven years. Had increased strength, sounder sleep, more cheerful disposition, thicker and healthier hair, no more problems with chills. Another woman, after giving birth to last child, was depressed and hormones messed up, with irregular periods. Within three months of taking bee pollen, started having normal periods and moods leveled off. Nails started growing strong and long, and no longer split and chipped off.

12. Woman, aged seventy-two, suffered great pain from arthritis in knees, feet, hands, back and right hip complicated by osteomyelitis which had left one leg shorter than the other. Took teaspoonful of bee pollen granules before meals for thirty days, whence had more energy than for a long time. . . . At age seventy-five, and still on bee pollen, a recent physical exam found her in "text-book perfect" health with perfect blood pressure and an excellent blood analysis.

13. Male of fifty-five had had psoriasis for fourteen years. Two heaping teaspoons of granules for two months noted a reduction in areas of psoriasis, with more energy and strength.

14. Eighty-one year old former scoutmaster could not walk alone, and not far even with help. After two months on bee pollen he can now walk a mile, and does not lean on wife's arm to walk any longer.

15. Elderly lady with senility vastly improved by fresh granules daily.

16. Senior citizen feels wonderful with bee pollen.

17. Hair growing on bald spot and more energy, stable temper, loves people more, more patience, and no longer drinks beer or other alcoholic beverages.

18. Fighting radiation sickness, feels better with bee pollen.

19. Two skin lesions about face and head had refused to heal for over six months, have now vanished. More endurance, and stamina and requires less sleep.

20. Allergies much improved; no problem with irregularity.

21. Gray hair is turning back to black! Another says that thin hair is really thickened, lustrous and jet black as it used to be.

22. No longer have to get up every two hours to relieve kidneys and no longer chronic constipation or fatigue.

23. Don't take antacids anymore.

24. After taking bee pollen for ten months, arthritis of spine no longer wears me out and constant dizziness is gone; have good complexion.

25. For a year and a half suffered with eczema. Fingers cracked open and bleeding. Now healed.

26. Four pound poodle with arthritis could hardly drag himself. One teaspoon in food and he no longer suffers from arthritis. Preacher says he had arthritis in painful state in left foot and limped. Now its completely gone.

27. Leg pains gone, have lost fifty pounds and works every day of five day week.

28. Have had no cold, flu, or digestive troubles.

29. Suffers from emphysema, but now breathes more easily and is eating better.

30. Took pollen for forty-one days which took away bloatedness and is helping arthritis.

31. Seventy year old Noel Johnson, based on exercise, diet and bee pollen, was able to reverse long-standing heart condition, going from bed-ridden to champion long-distance runner, boxer and, as he describes it, stud at 80. Also lost arthritis, gout and bursitis.

Scientifically Established Miracles of Bee Pollen

A doctor wrote about a five year old child: "This is a severely developmentally delayed floppy child whose differential includes a structural abnormality in the brain or a genetic abnormality, some of which may be diagnosed by chromosome analysis or genetic screen." Parent's tried every possible approach with no improvement. The Easter Seals Rehab Center listed the child as "(1) Severe receptive and expressive speech/language delay; (2) Immature neuromotor functioning; (3) Delay in development of play/cognitive skills; (4) Questionable hearing acuity/perception; (5) Severe delays in all areas of development; (6) Severe hypotonia."

Her mother began to give Bee-Young tablets, and slow progress began: lost rag-doll floppiness, clung to mother when held. Later noted that her eyes fixed on colorful objects with interest; able to scoot body forward while sitting on couch; rolled over for the first time; reached with operational arm for articles; skin color better; able to drink from cup.

Improvement continued onward: Colleen is alert and interested in things around her -- this fact alone is "medically impossible" -- and is beginning to speak -- she smiles and laughs, loves hugs and kisses.

"A British physician rediscovered this old treatment and now successfully treats hay fever patients with his own unfiltered pollen-laden honey. He reports that during the first year of treatment, attacks are reduced. During the second year of treatment, his patients are entirely free of hay fever symptoms.

"Leo Conway, M.D. . . . treats his patients directly with pollen itself by oral ingestion, explaining, 'All patients who had taken the antigen (pollen) for three years remained free from all allergy symptoms, no matter where they lived and regardless of diet. Control has been achieved in 100 percent of the earlier cases and the field is expanding. . . . Ninety-four percent of all my patients were completely free from allergy symptoms. Of the other six-percent, not one followed directions, but even this small percentage were partially relieved nonetheless. Relief of hay fever, pollen-induced asthma, with ever-increasing control of bronchitis, ulcers of the digestive tract, colitis, migraine headaches and urinary disorders were all totally successful!'"

In nutritional tests, "Hundreds of mice have demonstrated that pollen is a complete food and that it is possible to let several

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successive generations be born and live without the least sign of distress while nourishing them exclusively on pollen."

"Bee pollen stimulates the production of hemoglobin . . . we have noted counts rising to 4 to 4.5 million. The large proportions of free amino acids, especially methionine, a specific medicine for the liver, explains the favorable action of bee pollen on that organ.

"Bee pollen contains all the essential components of life; it corrects the failings due to deficient or unbalanced nutrition. . .

Lecture by Gunther Vorwhol at a recent German Apiarist Convention in Sontra, Germany: ". . . the vitamin balance can be improved by eating this complete food from the bee hive," but additionally, "rutin . . . favorably influences the permeability of capillaries. . . ." and there are "important hormonal factors, substances which act like the estrogenic or gonadatropic hormones which so greatly aid the human reproductive functions, both male and female. . . ." and also, "bacteria-inhibiting effects of the pollen collected by bees. . . . medical experience teaches that the ingestion of bee pollen is recommended in the case of digestion difficulties, arteriosclerosis, and liver dysfunctions. It also improves the hemogram (blood production)."

Published in *La Revue de Pathologie Generale et de Physiologie Clinique* "The Physiological & Therapeutic Effects of Various Bee Pollen Extracts," Bee pollen contains "variable quantities of an antibiotic potent against E. coli and Proteus, as well as a substance which significantly accelerates healthy growth of mice receiving a complete and balanced diet from other sources. . . . the effect of bee pollen acts favorably on the intestines, on the hemoglobin level of the blood, and in the renewal of strength in convalescents and in the aged."

From the Institute of Apiculture, Taranov, U.S.S.R.: Bee pollen has a "very high content of the nucleics, RNA and DNA."

Alain Callias, Ph.D., Academy of Agriculture, Paris, France: "Bee pollen is more rich in proteins than any animal source. It contains more amino acids than beef, eggs, or cheese of equal weight."

From *Techniques du Directorat des services Veterinaires*: "There exists in bee pollen a principle which accelerates healthy growth. . . . Experiments have shown that bee pollen contains an antibiotic factor effective on Salmonella and some strains of Colibacillus."

From Romania, in a paper by G. Calcaianu and F. Cozma entitled, "Treatment with Bee Products of the Behavior Troubles in Young People in the Period of Puberty and Teenage," "Given regularly, bee products (pollen, royal jelly, and honey) lead to favorable results. . . . we can prevent important behavioral troubles."

In "Administration of Biological Pollen Products to the Undernourished," translated from Spanish Children's Hospital of Cordoba: [Out of thirty children under two years of age with varying degrees of malnutrition] "red blood cells and hemoglobin increased in 14 cases; calcium increased in 12 cases; urinalysis improved in 10 cases; proteins increased in 19 children. There was an 83.33 percent improvement in appetite."

In a special reporting from *Naturheilpraxis*, "A Summary of Clinical Tests Concluded With Bee Pollen," . . . a reduction of cholesterol and triglycerides and also of S-lipo-proteins and albumins, while K and S globulins increase. A normalization of cholesterol count . . . in 40 patients who suffered from cerebral sclerosis. . . . A treatment with a combination of bee pollen, royal jelly, and honey has positive effects during the biological crises of puberty and adolescence, during behavioral disturbances, with problems of adjustment, learning disabilities, neurotic disturbances, and excessive neuromuscular sensitivity. . . . increase work performance and favor blood circulation in the brain.

From Department of Agriculture, "Delay in the Appearance of Palpable Mammary Tumors in C3H Mice Following the Ingestion of Pollenized Food," by William Robinson, Bureau of Entomology, Agriculture Research Administration: Mice that were bred to produce tumors were supplied bee pollen, while a control group was not. Tumor incidence was 100% in the control group after 31.3 weeks, as expected. The bee pollen group delayed onset of tumors 41.1 weeks. Seven mice were tumor free at 56 and 62 weeks when the tests were terminated. Conclusion: ". . . bee pollen contains an anticarcinogenic principle that can be added to food."

L.J. Hayes, M.D., Apiculteur Haut-Chinois, Guebwiller in Mittelwigen: "Bees sterilize pollen by means of a glandular secretion which is antagonistic to tumors."

Sigmund Schmidt, M.D., The Natural Health Clinic, Bad Bothenfelds: "Bee pollen contains all the essential elements for healthy tissue and may well prove to be the natural cancer preventive all the world is seeking."

Ernesto Contreras, M.D., cancer specialist: "To my knowledge, there is no better and more complete natural nutrient than honeybee pollen."

Dr. Peter Hernuss, University of Vienna "conducted a study of 25 women suffering from inoperable uterine cancer. . . . [Surgery being impossible, they were all given chemotherapy]. . . . The lucky women given bee pollen with their food quickly exhibited a higher concentration of cancer-fighting immune system cells, their antibody production increased, and the level of their infection-fighting and oxygen-carrying red blood cells markedly improved. . . . The control group receiving a placebo did not experience relief."

In a Yugoslav paper, "Therapeutic Effects of Melbrosin in Irradiation of Diseases," [Melbrosin is a Swedish preparation of bee pollen, royal jelly, and honey.] ". . . 84 female patients were separated from a group of tumor-dose irradiated patients who suffered from gynecological carcinoma and who showed clear signs of X-ray disease: fatigue, lack of dynamism, anorexia, nausea, vomiting, diarrhea, headache, unconsciousness, insomnia, heat and perspiration strokes, tachycardia, increased temperature, etc. . . . After taking the preparation [Melbrosin], 30.5 percent . . . had no sign of fatigue; 66.7 percent felt light fatigue; only 2.8 percent still complained of severe fatigue; 38.9 percent no longer suffered from anorexia; 41.6 percent exhibited light anorexia; 8.3 percent moderate anorexia; 44.4 percent suffered no longer of nausea; in 50 percent, nausea was reduced to the mildest form; in only 5.6 percent did the intensity remain unchanged. Great improvement was also achieved in psycho and neurovegetative complaints. . . . it was possible to conclude that improvement was obtained in 88.8 percent of the cases. . . ."

From the Argonomic Institute, Faculty of Zootechnics, Rumonia, an animal study showed the "immune-strengthening effects of bee-pollen."

From Yuogslav, by Prof. Dr. Izet Osmanagic, University of Sarajevo, "Reduced Sexual Potency:" "Summary: . . . forty patients were examined. Eighty percent suffered from relative or absolute reproductive impotence and some from reduced capacity for intercourse. . . . 1. An improvement in the general state of health and subjective condition. 2. An increase in sexual activity. 3. Improved sperm production . . . obvious proof of the positive effects of the preparation in cases of reduced sexual and procreative potency."

A joint Swedish/German study of 212 male patients using twelve different urologists, showed improvement in a variety of sexual dysfunction and chronic prostatitis.

Using Cernilton, a Swedish pollen preparation, Dr. Gosta Leander of Stockholm reported in "A Memorandum Concerning a Statistical Evaluation of the Results of a Clinical Investigation of

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Cernilton," stating, "... it can be confirmed that a statistically highly significant effect of the compound could be demonstrated in prostatovesiculitis, estimated on the basis of a double-blind control study of 93 patients, 50 of whom received the compound, and 43 of whom received the placebo. A 92 percent ascertained improvement was confirmed in the group given the compound. The effects of the compound found during the course of this study has been established as statistically highly significant."

From Kyoto, Japan, "Use of Cernilton in Patients with Prostatic Hypertrophy," "... Of the ten cases which showed improvement, three were in the first degree of hypertrophy, four cases in the second degree, and three cases in the third degree. In two cases, symptoms recurred within one month after withdrawal of the drug; these patients eventually underwent prostatectomy. All patients in the third degree of hypertrophy subsequently underwent prostatectomy."

A later Japanese study concluded, "Of a total of 15 cases in the Cernilton group, 10 cases were effective; 3 cases slightly effective. Results obtained in the placebo group were much less favorable; effective in 7 cases; ineffective in 9 cases." No side effects reported in the 38 cases.

Egyptian scientists, F.A. Soliman and A. Soliman, in "The Gonad Stimulating Potency of Date Palm Pollen Grains," from the French journal *Experientia*, "Several investigators have extracted estrogenic materials from palm kernels and date pollen grains. . . . a gonad-stimulating principle was extracted from pollens. . . . combined activity of the two hormones present in 1 gram of pollen is close to 10 I.U."

From Rumania, Gh. Salajan and Gh. Baltan, in "Influence of Maize Pollen on Ovulation: Results of Incubation & Biological Value of Hen Eggs," Pigs, chickens and calves, pollen protein reduced food consumption, stimulated growth, increased ovulation, and in eggs, improved quality of incubation and the biological value of eggs.

From Yugoslavia, L. Pokrajcic and I. Osmanagic, entitled, "The Treatment With Melbrosin of Dysmenorrhea in Adolescence." [Melbrosin is a bee pollen/royal jelly compound.] One hundred and twenty 15 to 20 year old girls were included in this study which showed good results on "patients with underdeveloped constitutions and irregular menstrual cycles."

From Yugoslavia, Endocrinological Department of the University Clinic for Women at the Medical Faculty in Sarajevo, in "A Clinical Testing of The Effect of the Preparation Melbrosin on Women Suffering from Climacteric Syndrome," "... it may be said that in addition to causes of menopausal disturbances in general, this treatment offers justifiable indications that the preparation should be used in the treatment of all patients subjected to irradiation."

"A two-year study conducted by former Russian Olympic coach, Remi Korchemny . . . this study confirms is that bee pollen actually does improve the crucial recovery power of athletes after stressed performance."

"A study reported by *Aerospace Medicine & Life Sciences* proved that the average daily consumption of food falls by 15 to 20 percent when bee pollen is a regular item on the menu."

Dr. Lars-Erik Essen, M.D., . . . dermatologist of Halsinborg, Sweden, says, "Through transcutaneous nutrition, bee pollen exerts a profound biological effect. It seems to prevent premature aging of the cells and stimulates growth of new skin tissue. It offers effective protection against dehydration and injects new life into dry cells. It smooths away wrinkles and stimulates a life-giving blood supply to all skin cells."

G. Liebold, a holistic physician and psychologist of Karlsruhe,

Germany, in *Bee Pollen: Valuable Good Nutriment & Remedy*, "Bee pollen should be used as prophylaxis and therapeutical treatment against all the disease of modern civilization. . . . Bee pollen is an excellent prophylaxis and therapeutical treatment against all the precocious symptoms of old age. It should be considered a universal geriatric treatment in the form of a natural remedy."

Naum Petrovich Ioyrish, Chief of the former Soviet Academy of Vladivostok reported, "Long lives are attained by bee pollen users. It is one of the original treasure-houses of nutrition and medicine. Each grain contains every important substance necessary to life."

Propolis

"Propolis is the sticky resin which seeps from the buds of certain trees, the bees prefer poplar, and oozes from the bark of other trees, chiefly conifers."

Sometimes called "bee glue," propolis is blended with flakes "secreted from special glands on the underside of the bee's adomen. It is used by the bee to (1) reduce the size of the hive entrance, (2) plaster up unwanted holes to the outside, (3) cover over and sterilize dead organic matter [insects] that are too huge for the bees to remove, (4) line the interior of brood cells, (5) to keep the hive antiseptic.

Propolis offers "antiseptic, antibiotic, antibacterial, antifungal, and even antiviral properties."

Propolis was handmixed as varnish for Antonius Stradivarius (1644-1737), "for his incomparable musical instruments."

Part of the antimicrobial properties against various bacteria and fungal infections is due to galangin, caffeic acid, and ferulic acid.

Empirical evidence, testimonials, and scientific evidence for the benefits of propolis "are as many and varied as are those for bee pollen," but not widely known in the United States.

Royal Jelly

"Royal Jelly is the rich royal milk fed to the Queen bee for the whole of her life." By feeding larvae Royal Jelly, a Queen is produced, otherwise the outcome is not a Queen bee.

"Royal Jelly, a thick fluid of creamy consistency and milky-white in appearance, "is synthesized in nurse bees' bodies during the digestion of bee pollen, accounting for its remarkable quantities of hormonal substance and the strong proteins found in its highly nitrogenous composition."

Contents of Royal Jelly

"Royally jelly is chemically very complex." Moisture content is "66.05%; proteins 12.34%; lipids 5.46%; reducing substance 12.49%; minerals. 0.82%; with unidentifiable elements totally 2.84%.

"It is . . . exceptionally rich in natural hormones, offers an abundance of B vitamins (including thiamine, riboflavin, pyridoxine, niacin, pantothenic acid, biotin, inositol, and folic acid) plus vitamins A, C, and E. With twenty amino acids, royal jelly is a highly concentrated source of rich proteins, including cystine, lysine, and arginine. It possesses important fatty acids, sugars, sterols, phosphorus compounds, as well as acetylcholine. . . . rich in nucleic acids . . . DNA (deoxyribonucleic acid) and RNA (ribonucleic acid) . . . Gelatin, one of the precursors of collagen. . . gamma globulin . . . immuno-stimulating factor . . . decanoic acid which exhibits strong antibiotic activity against many bacteria and fungal infestations."

Scientifically Established Benefits of Royal Jelly

From Dr. A. Saenz, Head of the Laboratory of the Anti-Rabies Institute of Montevideo, Uruguay, later joining the Pasteur Institute of Paris, in a paper, "Biology, Biochemistry & The Therapeutic Effects of Royal Jelly in Human Pathology," says:

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

"When those who are suffering from arteriosclerosis are subjected to royal jelly treatment, the readings correct themselves. This correction of the plasma protein dispersion thus reestablishes normal activities of the metabolic process where lipoproteins originate."

". . . very significant improvements in thromboangeitis obliterans (Buerger's disease).

"Simple stress, physical or mental exhaustion, so frequent in modern life, is rapidly corrected by treatment with royal jelly.

"In manifestations of sexual involution, as well as in endocrine asthenias, royal jelly in association with classic therapies accelerates the normal re-establishment of disturbed functions by means of its action on the adrenal cortex."

Effects on weight of nursing infants is clearly evident, and improved tonic effect on child.

"Mimics [the action of] amphetamines without the harmful side effects.

"Cases of anxiety, depression, shock, and senility all benefit by royal jelly treatment . . . insomnia . . . corrected."

In gastroduodenal ulcer, "Its specific action is due especially to the presence of pantothenic acid, known to be necessary in the protection of the mucosa and the healing of ulcerations.

Several cases have been published of arthritics being helped.

"A satisfactory remission of Parkinson's disease. . . .

"Several specialists have employed royal jelly treatment with success in eczema, in neurodermatitis, and in impetigo. Its use is indicated in skin ailments with a very alkaline pH. Royal jelly has an acid pH which re-establishes the acid mantle of the skin."

H.W. Schmidt, M.D., in a lecture before the German Medical Association, topic, "Royal Jelly in Diet, Prophylaxis, and Therapy," says "The action of the active substances and nutrients contained in royal jelly takes place throughout the entire body and acts to regulate all the functions of the body. . . . it is apparent this is a powerful agent composed of hormones, nutrients, enzymes and biocatalysts which starts up and revives the functions of cells, the secretions of glands, the metabolism, and blood circulation. . . . it is the interplay of all the complex factors present in royal jelly which works to preserve life and strength in the organism, which delays the aging process, and which retains for as long as possible the youthful physical freshness of the body, elasticity of the mind, and psychic buoyancy."

How to Shop For Bee Pollen

1. Do not run to the nearest store and buy bee products without first learning about how they must be harvested, shipped, packaged and stored!

2. Buy bee pollen that comes from a widely varying geographic distribution, where its bulk source is from many different plants, and where the pollen has been blended and standardized.

3. Do not buy flower pollen, as the bee adds to the pollen, making it nutritionally active for human use.

3. Buy only bee pollen that has been deep frozen at the site of collection, and kept dry, unpolluted and frozen until packaged. Heat-treated pollen is robbed of nutrition. Pollen collected in humid climates is often poor.

4. If you can, buy pollen collected from unpolluted sources: no pesticides, herbicides, as far away from industrial pollution as possible.

5. Your taste test should be "sweet, fresh, and delicious;" your see test should note pollens of varying shades of gold, ranging from pale straw through oranges, browns, purples, to almost black; your feel test between thumb and middle finger should be soft and springy. If it crunches in your mouth and refuses to dissolve on your tongue, it has been destroyed and has little nutrient value.

6. Insure that the husk which surrounds the pollen has been prepared for human digestion and assimilation by means other than

heat, chemicals, radiation or alcohol.

7. Insure that the bee pollen purchased and used has available a listing of nutritional content, and that the content is not deficient in certain appropriate vitamins, minerals, etc.

8. Purchase from only a reputable, reliable dealer.

In the words of *Health Freedom News*, October 1990, "From the Forum," by James F. Scheer: "What other health product contains 185 of the known nutritional ingredients -- 22 amino acids and higher amounts of the eight essential ones than most high protein foods, 27 mineral salts, the entire range of vitamins, hormones, carbohydrates and fats and more than 5,000 enzymes and coenzymes, necessary for digestion, healing and for the continuity of life itself?"

The Rheumatoid Disease Foundation expresses its appreciation and thanks to C.C. Pollen Company for permission to use the foregoing materials, and especially to Royden Brown who has diligently researched and applied his findings for the purpose of bringing to us the very best possible bee products.

References

1. Royden Brown, *How to Live the Millennium*, C.C. Pollen Company, 3627 E. Indian School Rd., Suite 209, Phoenix, AZ 85018-5126.