

PropolisScience.org

Vol. 1, No. 2 • 2015

by Mark J Kaylor, M.H., C.N., Ph.D.

FOUNDER, RADIANT HEALTH PROJECT

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Propolis' Anti-bacterial Power

Propolis inhibits bacterial growth by preventing bacterial cell division

Propolis destroys the bacteria's cell structure

Propolis causes the destruction of bacteria – a process called bacteriolysis

Propolis inhibits protein synthesis that is necessary for bacterial growth & reproduction

Propolis shown to potentiate effectiveness of several antibiotics

Propolis - Keeping Us Healthy Through Cold & Flu Season

It's that time of the year again, when numerous factors seem to conspire to get us sick. And though most Americans still walk into a drugstore for relief, more and more folks are waking up to the fact that symptom suppression, like that found in decongestants, does nothing for the root cause of the problem. The downside to this symptomatic suppression approach is that it may drive the condition deeper into the body only to be manifested worse at a later date. The good news is that you can walk into any health food store and find a myriad of cold & flu fighters as well as immune supporting products that work more with the body rather than by suppressing it. There is one supplement that stands out though – Propolis. While Propolis has a diverse mix of non-immune healing actions (which we will explore in future issues), it is the immune related ones we will focus on here.

Historically many of the cultures that utilize Propolis did so, often primarily, for its immune and anti-microbial actions (see **Propolis Throughout History**). Propolis offers a built-in holistic approach to keeping us healthy through the cold & flu season. First and foremost is its ability to support, activate, and boost our body's natural defenses. It increases the number of immune cells, boosts immune cell activities, ups antibody production, activates macrophages (increasing numbers, responsiveness, and bacteria killing) and increases Natural Killer cell activity.

What this means for you is that Propolis works with your body's natural immune defenses helping you resist these microbial invaders. A healthier more rigorous immune system also means your odds of catching a cold or flu are less likely. And, if you do get sick, your body is in a better position to battle the offending agents resulting in a shorter duration of the illness, along with milder symptoms. All this because your immune system is now doing the job.

In this day and age of increasing antibiotic resistance Propolis offers us an effective option. Researchers have confirmed Propolis' anti-bacterial actions — even against a number of drug-resistant strains — with research beginning as early as the 1940s. (See **Anti-bacterial Power** insert)

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🎤 Health From The Hive

What to look for in a **Propolis product for** you and your family.

- 1) Where the Propolis is sourced - make sure it comes from a pristine environment.
- 2) Extracted Propolis. As a waxy resin raw Propolis is not particularly digestible, so to make the many healing constituents available it needs to be extracted.
- 3) Propolis naturally contains allergens. Make sure your Propolis is processed in a way that removes these allergens.
- 4) Propolis' constituents can significantly vary seasonally and regionally; by standardizing the active compounds you can be sure that the Propolis contains the compounds you are looking for, and at guaranteed levels.
- **5**) Proper extraction of Propolis makes for a more effective product. To get the broadest array of active compounds make sure both the water soluble and alcohol soluble constituents are extracted.
- 6) Since the bees make it all possible I lean towards companies that give back and support the bees and the beekeepers.

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Not only does Propolis produce these direct attacks on bacteria, several studies have shown that it can actually potentiate the beneficial effect of several antibiotics along with preventing or reducing an individual's tolerance build-up to antibiotics.

Propolis has been shown effective against a number of drug resistant viruses, bacteria and fungal infections.

Thankfully, especially this time of year, it is good to know that Propolis offers somewhat similar support in our efforts to fend off cold & flu viruses. Key to Propolis' anti-viral benefits is that it works in several ways and on multiple levels. (See Anti-viral Super Hero insert) By attacking the virus by means of several mechanisms you increase the likelihood of defeating the viral invaders at the same time you decrease the likelihood of the viruses developing resistance. It's cyto-protective actions help prevent viruses from entering and taking over our cells, which they need to do in order to replicate and thrive. In doing this, Propolis becomes a helpful ally in viral prevention – so don't wait to get sick before you start taking your Propolis.

Research confirms the practical anti-microbial applications of Propolis, demonstrating effectiveness internally and topically (by means of a nasal spray) for relief from sinus infections. Another study found benefits for respiratory infections using a product that has been employed in Europe for years and is now available in the U.S. In animal studies looking at its effects in deadly influenza, researchers found it decreased mortality while increasing survival time.

A number of symptoms have been found to be relieved with the use of Propolis, including fever, headaches, body aches, coughing, and sneezing,

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Are there any safety issues associated with the use of Propolis?

Yes and No. It all comes down to what Propolis you are using; where it was sourced from; and how it was processed. Bees gather Propolis from the environs surrounding the hive, so if the air is polluted the resin the bees harvest is likely to be tainted as well. Heavy metal and pesticide residue are of particular concerns. This is why you want your Propolis to come from pristine areas. This is one of the reasons I personally choose Brazilian Propolis.

The other area of primary concern is related to allergies. Propolis naturally contains a few percentage points of pollen so folks with sensitivities to these strains of pollen may have an allergic response to them. Thankfully a specific Green Extraction can be done that removes

> these common allergens, as well as possible toxins that I mentioned above.

Keep in mind though that Propolis has been used for thousands of years by humankind the world over and is one of the safest natural remedies available. But just to be sure, source Propolis that orginates from a pristine environment and is extracted properly to remove any toxins or allergens.

Are there different types of Propolis?

A It is generally accepted that there are three primary types of Propolis, each based upon the color, Brown – the most common, Green – found in the South East corner of Brazil, and Red – which is the most recently discovered. Since Propolis can significantly vary regionally as well as seasonally and even meteorologically, it is important to use a Propolis that comes from the same reliable consistent source and is ideally, standardized, ensuring you are getting a product you can consistently count on.

Red Propolis Promotes Nerve Recovery & Repair

An extract of Red Propolis supported functional recovery after sciatic nerve injury. It also promoted regenerative responses to the damaged nerve fibers.

Hydroalcoholic extract of red propolis promotes functional recovery and axon repair after sciatic nerve injury in rats. Barbosa RA1, et al.

Pharm Biol. 2015 Oct 29:1-12.



Brazilian Green Propolis Offers Help to Patients With Type 2 Diabetes

A double-blinded placebo controlled study found that Brazilian Green Propolis prevented patients with type 2 diabetes from developing worse blood uric acid (UA) and estimated glomerula filteration rate (eGFR). Both UA and eGFR are linked to kidney health.

Effect of Brazilian green propolis in patients with type 2 diabetes: A double-blind randomized placebo- controlled study.

Fukuda T, et al.

Biomed Rep. 2015 May;3(3):355-360.



Brown Propolis Significantly Reduces Dental Plaque

This 3 month study compared the anti-plaque actions of Propolis and Aloe Vera. Propolis demonstrated



greater effectiveness against more plaque causing micro-organisms than did Aloe. It also saw a significant reduction in plaque as well as clinical measures.

Comparison of Plaque Inhibiting Efficacies of Aloe Vera and Propolis Tooth Gels: A Random PCR Study

Kumar A, et al.

J Clin Diagn Res. 2015

Propolis Throughout History

A recently uncovered archeological discovery has found that humans have been beekeeping for at least 8,500 years. This long history of use has resulted in a pretty in-depth understanding of the various gifts from the hive, including Propolis.

The ancient Egyptians, Persians, Greeks and Romans all used Propolis, and it had been used in primary medicine up through WW II where it aptly became known as "Russian penicillin". The Greeks are responsible for its current nomenclature, "pro" meaning before or in front of and "polis" for city. The likely reason for this is because bees line the entrance of their hive with Propolis, acting as a sort of bee-wash when the bees enter the hive.

Ancient Egyptians considered Propolis to be the "secret to eternal health and life". It is also commonly thought that Propolis was a compound in the mummification mixture, not unlike how bees use it to cover the carcass



Stradivarius coated his violins with oil, beeswax and propolis of any large intruder to the hive once it has been killed so that it won't

break down and create unhealthy conditions in the hive.

Several famous healing historical authorities utilized Propolis as part of their medicine chest. Hippocrates, the famous Greek physician, wrote that it was useful to treat sores, ulcers, and bruises. The famous Roman physician, Pliny, used it to disperse tumors and thought so highly of it as a first aid remedy that he wrote Propolis "heals sores when it appears hopeless for them to mend". It is no surprise then that Roman Legionnaires were known to carry some Propolis in their first aid pouches to apply to wounds and injuries.

The great Persian physician, Avicenna, also thought highly of Propolis' healing potential; in an ancient manuscript he suggested its use for eczema, myalgia, and rheumatism. The Renaissance era author of one of

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Propolis "WAKES UP" ш immune **ECELLS**

demonstrating surprising effectiveness at this. Also a Russian study of 260 patients saw a reduction in sore throats and coughs in 90% of cases. Showing that Propolis "plays well

with others" an Israeli study of 400 children used Propolis, Echinacea, and Vitamin C to shorten duration and lessen severity of symptoms.

Propolis is yet another example of the amazing health and healing potential that nature makes available to us. It brings potent preventive actions to the cold & flu battle - which after all, is the best kind of medicine. Propolis offers powerful and effective immune support while

targeting bacterial and viral invaders in a number of different ways. All this adds up to a powerful healing ally that can help us through the cold

Propolis – Anti-viral Super Hero

Reduced virus numbers Inhibits virus activation Prevents virus from entering host cell **Enhances viral clearance** Interferes with viral RNA-DNA synthesis **Demonstrated effectiveness against** drug-resistant viruses

& flu season. And keep in mind, there is no better time than the present to get started on an immune and health-supporting program utilizing the effective and versatile Propolis.

Propolis Throughout History - Continued from page 3

Propolis REDUCES excessive inflammation

the most influential herbals, Gerard, wrote that Propolis was useful for all types of inflammation. Propolis' use was not only limited to European/Mediterranean cultures; for example, the

Incas used it as an anti-pyretic, while the Chinese employed it for toothaches and infections.

For me, one of the most intriguing things about these historical uses is that, amazingly, most, if not all of these traditional applications have now been confirmed by modern research. All except of course the "eternal life" of the Egyptians. However a more recently discovered type of Propolis, Brazilian Red, I feel, may well be a longevity aid – more on this in an upcoming issue.

With the onset of modern medicine and the widespread use of antibiotics Propolis fell out of favor. Thankfully, researchers over the last several decades have rediscovered the healing potential of this amazing gift from the beehive. And not a moment too soon considering the growing concerns over an increasing number of microbes becoming resistant to conventional treatment. This is an area Propolis can excel at since research shows its synergistic use with antibiotics significantly decreases the likelihood of bacterial resistance developing. On top of this, thanks to a wide array of active anti-microbial compounds,

> bacteria are not able to develop resistance to Propolis' bug killing actions. So you could say, Propolis' time has finally come, and now with the research to prove it.



Welcome to the 2nd edition of the "Health From The Hive" newsletter, brought to you by the Propolis Science Center, an effort by the non-profit Radiant Health Project to share information, research, and uses of the powerful healing gifts from the beehive that Bees provide. We would love to hear from you. Please let us know what you think and what you'd like to see covered in

future issues. We will incorporate an ongoing Q & A in "Health From The Hive", so go to PropolisScience.org or www.facebook.com/healthfromthehive to pose your queries there.

Mark J Kaylor is a holistic health practitioner and lecturer who integrates herbs, nutrition, naturopathy and various traditional healing modalities. In his role as an educator and healer, Mark works passionately to encourage individuals to empower themselves and to discover their own path to radiant health. He has worked in the Natural Foods Industry for over 30 years as a leading holistic health educator, and formulator. Mark is the founder of Radiant Health Project and author of "Health From The Hive". You can reach him at his website www.radianthealthproject.com or www.propolisscience.org.



Coming in Future Issues

- Propolis and Cancer
- Surprising and Diverse **Applications for Propolis**
- Oral Health and Propolis
- Propolis' Friends and Allies
- Plus much, much more, including your queries and questions