



Regenerlife™

BEEPOWERFUL

300 mg

NPN 80030234

RESEARCH INFORMATION

Feature summary

Regenerlife BeePowerful is formulated for energy from within, providing a rejuvenating combination of bee pollen, bee propolis, Siberian ginseng, and green tea. Together, these ingredients supply antioxidants, amino acids, vitamins, minerals, coenzymes, and fatty acids for nourishment and support when you need it most.

Bee products, such as pollen and propolis, have been valued for their natural healing properties for centuries. Bee pollen contains a complete set of amino acids alongside bioactive compounds like enzymes and coenzymes. Bee propolis is packed with antioxidant flavonoids and is used in herbal medicine to help relieve sore throats and other mouth or throat infections.

Siberian ginseng is traditionally used in herbal medicine to improve mental and physical performance after periods of exertion, including recovery from illness and general weakness. Green tea is loaded with antioxidants, such as catechins and epigallocatechin gallate (EGCG), for additional cellular protection and support with age.

BeePowerful is part of the Regenerlife healthy-aging line of supplements formulated for whole-body rejuvenation and longevity. The convenient daily capsules contain high-quality, non-GMO ingredients standardized to their key active components. This formula is a great choice for anyone who wants to complement their healthy lifestyle habits with improved stamina and immunity.

How it works

Bees gather pollen from plants and make propolis from tree sap to seal and sterilize their hives. Both pollen and propolis contain natural micronutrients and antioxidants that boost the body's defences against free radicals and harmful oxidative processes (Kocot et al., 2018).

Bee pollen nourishes and energizes the body by providing branched-chain amino acids (BCAAs), fatty acids, essential vitamins, and minerals (Kocot et al., 2018). It also contains flavonoids that increase the body's immune system response (Jannesar et al., 2017). Propolis contains amino acids, vitamins B1, B2, B6, C, and E, micronutrients, and a range of antioxidant flavonoids, phenols, and other plant metabolites with antioxidant, anti-inflammatory, and antimicrobial properties (Kocot et al., 2018). Working at a molecular level, flavonoids activate the mitochondrial pathway and counteract inflammatory processes (Tsamesidis et al., 2022). Propolis also stimulates antibody production through the combined activity of its components (Gao et al., 2014).

Active ingredients in Siberian ginseng, called eleutherosides, have anti-fatigue and anti-stress activities. They enhance energy production by improving the body's use of oxygen and inhibiting the breakdown of proteins (Todorova et al., 2021; Li et al., 2021). Polysaccharides in Siberian ginseng increase immune system cell activity (Li et al., 2021).

Green tea contains polyphenols and catechins that have antioxidant and anti-inflammatory activity. EGCG and theanine are key actives that pass through the blood-brain barrier to protect brain neurons and increase brainwave activity (Noguchi-Shinohara et al., 2014).

Research

As we age, our bodies undergo a natural process of gradual wear and tear, affecting everything from our cells to our overall vitality. This degradation is partly caused by increased oxidative stress on our cells' lipids, proteins, DNA, and other important molecules, as well as changes in how our cells handle essential tasks (Kocot et al., 2018; Janikiewicz et al., 2018). The energy powerhouses of our cells, called mitochondria, become less efficient over time, leading to common signs of aging like decreased energy, heightened susceptibility to stress, and a greater likelihood of health issues (Janikiewicz et al., 2018). Targeted supplementation, in addition to other healthy lifestyle choices, can help counteract these changes by providing essential nutrients that promote overall cellular health and resilience.

People have been relying on the nourishing qualities of bee products, such as propolis and pollen, since ancient times. Pollen is the material that bees collect from plants, while propolis, also known as “bee glue,” is a resinous mixture of naturally occurring vitamins, minerals, and antioxidants (Kocot et al., 2018). As rich sources of antioxidants and essential nutrients, pollen and propolis are traditionally used for healing and promoting overall vitality and well-being (Tsamesidis et al., 2022). They provide a natural form of protection against mitochondrial damage from oxidative stress (Kocot et al., 2018). A study evaluating the antioxidant benefits of bee products found that people who were supplemented with propolis, with or without honey for one month, reduced their levels of oxidative stress, measured as reactive oxygen species (ROS), by at least 48%. In comparison, people who did not supplement with bee products experienced a 10% increase in oxidative stress levels (Tsamesidis et al., 2022).

On average, bee pollen contains 23% protein, including the essential amino acids tryptophan, phenylalanine, methionine, leucine, lysine, threonine, histidine, isoleucine, and valine, which we rely on for growth and well-being (Khalifa et al., 2021). Evidence suggests that consuming bee pollen can enhance immunity and increase physical and mental activities (Khalifa et al., 2021).

Siberian ginseng, also called *Eleutherococcus senticosus*, has over 5,000 years of traditional use in Chinese medicine. Old and new evidence suggests that its effects on the body increase during periods of stress, which categorizes it as an herbal adaptogen and makes it a popular supplement for weakness and immunity-related concerns (Malik & Tlustoř, 2023; Graczyk et al., 2022). In a placebo-controlled, double-blind study, older volunteers who were supplemented with Siberian ginseng were found to temporarily increase their ratings of mental health and social functioning after four weeks (Cicero et al., 2004).

Chinese and Japanese cultures have long recognized that consuming green tea fosters well-being and longevity. The healthy-aging and neuroprotective effects of green tea are largely associated with its high concentration of catechins, such as EGCG and L-theanine. Research suggests that drinking green tea regularly supports physical and cognitive health as we age (Naumovski et al., 2019). A study analyzed the impact of consuming green, black, or no tea on successful aging in adults over 50 years. Adjusting for relevant factors, people who drank green tea were found to have higher physical activity levels and a reduced likelihood of blood pressure concerns compared to people who drank black tea. Compared to black tea, drinking green tea also increased the likelihood of participants having a high “successful aging index” by 38% (Naumovski et al., 2019).

Ingredients

Each capsule contains:

Bee pollen	300 mg
Bee propolis extract 2:1 (<i>Apis mellifera</i>) (secretion)	150 mg
Siberian ginseng extract 15:1 (<i>Eleutherococcus senticosus</i>) (root)	150 mg
(Equivalent to 2250 mg crude herb. Standardized to 0.8% eleutherosides)	
Green tea extract (<i>Camellia sinensis</i>) (leaf)	75 mg
(Contains 75% catechins, 40% EGCG, and 10% caffeine)	

Dosage

Recommended adult dose: 1 capsule daily with food or as directed by a health care practitioner. Consult a health care practitioner for use beyond one month.

Cautions

Consult a health care practitioner prior to use if you have any type of acute infection, iron deficiency, or a liver disorder, or if you are allergic to poplar tree products or balsam of Peru. Stop use and consult a health care practitioner if you develop symptoms of liver trouble, such as yellowing of the skin/eyes (jaundice), stomach pain, dark urine, sweating, nausea, unusual tiredness, and/or loss of appetite. Rare, unpredictable cases of liver injury associated with products containing green tea extract have been reported (in Canada and internationally). Consult a health care practitioner if symptoms persist or worsen. Stop use immediately if hypersensitivity/allergy occurs. Do not use if you are allergic/hypersensitive to bee-products or pollen, have high blood pressure, or are pregnant or breastfeeding. Keep out of the reach of children.

References

- Cicero, A.F., Derosa, G., Brillante, R., et al. (2004). Effects of Siberian ginseng (*Eleutherococcus senticosus* Maxim.) on elderly quality of life: A randomized clinical trial. *Arch Gerontol Geriatr Suppl*, 2004(9), 69-73.
- Gao, W., Wu, J., Wei, J., et al. (2014). Brazilian green propolis improves immune function in aged mice. *J Clin Biochem Nutr*, 55(1), 7-10.
- Graczyk, F., Gębalski, J., Makuch-Kocka, A., et al. (2022). Phenolic profile, antioxidant, anti-enzymatic and cytotoxic activity of the fruits and roots of *Eleutherococcus senticosus* (Rupr. et Maxim.) Maxim. *Molecules*, 27(17), 5579.
- Janikiewicz, J., Szymański, J., Malinska, D., et al. (2018). Mitochondria-associated membranes in aging and senescence: Structure, function, and dynamics. *Cell Death Dis*, 9, 332.
- Jannesar, M., Sharif Shoushtari, M., Majd, A., et al. (2017). Bee pollen flavonoids as a therapeutic agent in allergic and immunological disorders. *Iran J Allergy Asthma Immunol*, 16(3), 171-82.
- Khalifa, S.A.M., Elashal, M.H., Yosri, N., et al. (2021). Bee pollen: Current status and therapeutic potential. *Nutrients*, 13(6), 1876.
- Kocot, J., Kielczykowska, M., Luchowska-Kocot, D., et al. (2018). Antioxidant potential of propolis, bee pollen, and royal jelly: Possible medical application. *Oxid Med Cell Longev*, 2018, 7074209.
- Li, X., Chen, C., Leng, A., et al. (2021). Advances in the extraction, purification, structural characteristics and biological activities of *Eleutherococcus senticosus* polysaccharides: A promising medicinal and edible resource with development value. *Front Pharmacol*, 12, 753007.
- Malik, M., & Tlustoř, P. (2023). Nootropic herbs, shrubs, and trees as potential cognitive enhancers. *Plants*, 12(6), 1364.
- Naumovski, N., Foscolou, A., D'Cunha, N.M., et al. (2019). The association between green and black tea consumption on successful aging: A combined analysis of the ATTICA and Mediterranean Islands (MEDIS) epidemiological studies. *Molecules*, 24(10), 1862.
- Noguchi-Shinohara, M., Yuki, S., Dohmoto, C., et al. (2014). Consumption of green tea, but not black tea or coffee, is associated with reduced risk of cognitive decline. *PLoS One*, 9(5), e96013.
- Todorova, V., Ivanov, K., & Ivanova, S. (2021). Comparison between the biological active compounds in plants with adaptogenic properties (*Rhaponticum carthamoides*, *Lepidium meyenii*, *Eleutherococcus senticosus* and *Panax ginseng*). *Plants*, 11(1), 64.
- Tsamesidis, I., Egwu, C.O., Samara, D., et al. (2022). Effects of Greek honey and propolis on oxidative stress and biochemical parameters in regular blood donors. *J Xenobiot*, 12, 13-20.