Organic Royal Jelly

**Key Benefits**

- All of the essential amino acids our bodies need but cannot produce on their own.
- Naturally occurring vitamins A, B complex, C, D, E, etc.
- Trace minerals, calcium and iron, natural hormones
- Acetylcholine (for transmitting nerve message)
- Nucleic acids like RNA and DNA (the genetic code which makes up life)
- Gelatin (anti-aging effect)
- Ecanoic acid (natural antibiotic abilities)
- Gamma globulin and adenylic nucleotides (fights infection and stimulates the immune system)

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**What is Royal Jelly?**

Royal jelly is made by nurse bees which chew pollen and mix it with secretions from glands in their mouth. Royal jelly is the sole food of the queen bee, allowing her to live an amazing 50 times longer than regular bees. Royal jelly is an energy and nutritive tonic with a strong effect on the glandular system and is considered strengthening for the reproductive systems of both men and women.

Royal jelly has also been used to effectively treat malnutrition in children, arthritis, wasting diseases, varicose veins and clogging of the arteries. It promotes growth and development and is useful in the treatment of blood deficiency. When royal jelly is added to the diet, most people notice an increased hormonal activity in terms of an improved sense of well-being and more energy.

**Nutritional Powerhouse**

Royal jelly contains a powerful antibacterial protein and is rich in amino acids, containing at least 20 amino acids, including 8 essential amino acids and 5 unidentified related compounds. Royal jelly proteins are characterized by a very high biological value with an index ranging between 74.4 and 83.1. Royal jelly also contains aspartic acid, which is necessary for tissue growth, and nucleic acids, RNA and DNA. Royal jelly is primarily effective against “gram-positive” bacteria, which include the staph and strep species.

**Anti-Tumor Properties**

Royal jelly also has anti-tumor properties. Royal jelly produced dramatic results in one study on sarcoma cancer cells. The lifespan of mice with sarcoma that were treated with royal jelly was extended about one-fifth longer and the size of their tumors decreased in size by one-half, compared to mice that were left untreated.

**Pre-Treatment**

In another study, at the University of Toronto, mice were pretreated with royal jelly. They were then implanted with cancer cells. All the mice that were pretreated with royal jelly remained alive and healthy for the entire 12 month follow-up period. The mice left untreated died within 12 days. When the researchers gave the mice the cancer cells and the royal jelly at the same time, the cancer continued to grow and eventually killed the mice. Therefore, pretreatment is the key, which supports the idea of taking royal jelly daily as a preventive measure instead of waiting for disease or infection to develop.
Clinical Uses of Royal Jelly
Royal jelly has multiple broad-range claims. It is an excellent daily tonic for the very young to the elderly. The biological actions and clinical uses for royal jelly as described in medical literature are:

**Tonic Action.** Royal jelly is perhaps the most gentle of the natural nutritional tonics. It is appropriate for young children, pregnant and nursing women, the elderly and the very weak. It helps increase general vitality as well as improving mood and appetite. It offers excellent results in recovery from long-term illness or convalescence, intestinal complaints, anorexia, under weight conditions and retarded growth.

The tonic revitalizing action of royal jelly is not linked so much to the quantity of major constituents (such as proteins, lipids, sugars) but the quality of the micronutrients, such as natural B vitamins, pantothenic acid and taurine. This amino acid, in fact, allows for better use of proteins and lipids obtained through diet.

There are some pediatric applications of royal jelly. In the treatment of premature infants and to obtain an increase in ponderal indices in pediatric subjects, infants between 4 months and 22 months old, suffering from even serious digestive problems, undernutrition, metabolic disorders and recovering from infectious diseases, showed a net improvement after consumption of royal jelly. It is often cited in medical literature for its anti-anorexic action.

Royal jelly can offer a remarkable invigoration of physical and mental functions for the elderly. With senile people in particular, the benefits of royal jelly led to a resumption of physical activity, an improvement of mental activity, and an increase in appetite and weight. According to research, royal jelly can help regulate blood sugar, increasing the quantity of glucose, held in the blood when it is low, and, conversely, decreasing blood sugar when it is too high.

Royal jelly helps stimulate metabolism and increase tissue consumption of oxygen. This action may be due to various factors, such as vitamins B1, B2, pantothenic acid and trace elements present in royal jelly, such as iron and copper.

**Antibacterial Action.** Royal jelly possesses an antibacterial action in the presence of various microorganisms, such as Bacillus subtilis, Staphylococcus aureus, Escherichia coli, Streptococcus hemolyticus, Enterococcus, etc., in vivo or in vitro.

According to research, 10-HDA acid (trans-10-hydroxy-2-decenoic acid) is the constituent yielding antibacterial action. A protein identified in royal jelly's royalism has a potent antibacterial activity against Gram-positive bacteria and a weaker activity against Gram-negative bacteria.

**Immuno-Stimulant Action.** Royal jelly possesses an immunomodulatory action and is known to stimulate production of antibodies and increase the proliferation of immunocompetent cells.

**Hypolipemic Action.** A recent review analyzed existing medical literature on the hypolipemic action of royal jelly. Research shows that royal jelly helps decrease cholesterol and triglyceride levels in animals fed a hyperlipemic diet and also retards the formation of atherosclerotic plaque. In humans, taking 50 to 100 mg. daily of royal jelly helps reduce cholesterol and total lipids up to 10% and also helps normalize the LDL and HDL levels.

**Anti-inflammatory Action.** Royal Jelly has anti-inflammatory action. It also stimulates the healing process of slow-healing wounds in animals rendered diabetic experimentally and of duodenal ulcers in humans.

**Easily Tolerated.** Royal jelly presents no type of contraindication or side-effects. Even very young children, pregnant or nursing women, the elderly or those recovering from illness, can easily take it without side effects.

References
Better Nutrition, July 1998; 34.
Fujiwara S. Journal of Biological Chemistry; July 5 1990. 265; 11333-7
Healing with whole foods; 225, 328, 348, 364.
Sver L, Orsolic N, Tadic Z, Njari B, Valpotic I, Basic I. Department of Biology, University of Zagreb, Croatia. A royal jelly as a new potential immunomodulator in rats and mice. Comparative Immunology, Microbiology and Infectious Disease 1996; 19:31-8.