

38. THE USES OF ROYAL JELLY AS A NATURAL TREATMENT REMEDY

Author: Cristina Ilies

Scientific adviser: Alexandru Znagovan, PhD, Associate Professor, Department of Drug Technology, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova

Introduction. In some European countries, such as France and Belgium, royal jelly is already considered a food. The same is true in other countries, such as Uruguay, where it is sold in stores, under the authorization of the State Office of Food Science. It is true, that is not necessary to consume in large quantities. The reservoir of vitamins, minerals, trace elements, amino acids, enzymes, royal jelly is a perfect choice. Being a bee product with the most complex and various actions on the body, royal jelly contains almost all nutrients needed by the body being the only natural source of 10-HDA acid and acetylcholine, essential nutrients, being unfeasible to synthesize.

Aim of study. Study and analysis of national and international bibliographic sources regarding the benefits and uses of royal jelly as a natural product in traditional treatment.

Methods and materials. Bibliographic sources were analyzed using PubMed, Publons, Scopus and others databases.

Results. Royal jelly is a secretion made by young nurse bees working in the hypopharyngeal glands, and is used in the feeding of queens, both in their larval and adult state. Royal jelly has a major component of fatty acid, namely 10-hydroxy-trans-2-decenoic acid (10H₂DA), being used as a traditional medicine and as a dietary supplement in the past to treat many diseases. In Japan, for example, it has been shown that under the action of royal jelly, new neurons, oligodendrocytes and astrocytes are differentiated from nerve stem cells (Shoei Furukawa et al.). In other words, the old theory of traditional medicine that neurons and other nerve cells cannot regenerate has been overturned. Furthermore, royal jelly is perhaps the most powerful stimulant of stem cells. This miraculous elixir is used in the treatment of various diseases, namely: inherited genetics; in degenerative diseases; in maintenance treatment; in malignant diseases; a natural remedy for patients with type 2 diabetes; a solution for regulating blood sugar; respiratory disorders; dermatological problems; disorders of the peripheral nervous system; ophthalmic pathology; diseases of the internal organs. The phenolic compounds, namely flavonoids in royal jelly carry antimicrobial, antifungal, anti-inflammatory, and wound-healing benefits.

Conclusion. Royal jelly positively regulates the body's antioxidant status. Royal jelly differs slightly from other useful bee products. This product has gained value due to its composition and delicate effect on the body. The correct and regular use of the product ensures not only the general strengthening of the body, but also the elimination of quite serious pathologies.