Royal Jelly
WHAT ALL THE BUZZ IS ABOUT
by Julie Rothschild Levi

Produced by glands in worker bees' heads, royal jelly is fed to larvae and the adult queen bee. The larvae that are fed only royal jelly become queen bees; those not fed royal jelly become simple worker bees. The queen grows 40-60 percent larger than the worker bees and lives 4-6 years, whereas worker bees live just 6 weeks on average. The queen also produces one and a half times her own body weight in eggs, making royal jelly not only a longevity marvel but a fertility enhancer as well.

And if that's not enough, it's also a nutritional powerhouse. Royal jelly contains all of the B-complex vitamins, with high concentrations of pantothenic acid (B₆) and pyridoxine (B₆), plus minerals, vitamins A, C, D and E, enzymes, hormones, and 18 amino acids. It also contains DNA and gelatin—a predecessor of collagen and an anti-aging compound that helps preserve skin. Royal jelly is a popular ingredient in cosmetics, particularly those marketed for skin rejuvenation, and it's found in creams or ointments for burn and wound healing.

What Are the Health Benefits?
Since the 1950s, people have believed that royal jelly has the ability to work myriad health miracles in humans as well as bees. Anecdotal evidence on its benefits abound. There are claims that it provides an immediate feeling of well-being, resistance to fatigue, a greater learning capacity and better memory. It is also reported to work as a stimulant, an immune-response intensifier, a fertility and libido booster, a cholesterol controller, a natural antidepressant and a weight-loss enhancer.

Research has linked royal jelly intake with the potential for health and healing, but experts caution that the data is preliminary as most of it has been conducted solely on laboratory mice and rats. According to Catherine Ulbricht, PharmD, chief editor of Natural Standard (naturalstandard.com), an international organization that researches alternative and complementary therapies, more studies on royal jelly need to be done.

Examples of royal jelly's promise can be found in scientific journals such as the June 2004 issue of the Journal of the Science of Food and Agriculture. It reported that bee products such as royal jelly, propolis and venom might help prevent cancer by inhibiting tumor growth; the study was done on mice.

The December 2002 issue of the Townsend Letter for Doctors & Patients showed that there is some evidence that royal jelly supports liver health and liver cell growth. It may support glycogen restoration, and it may also detoxify lactate and ammonia—waste products found to cause fatigue—as well as enhance oxygen intake in the liver.

And royal jelly was found to have an anti-hypertensive effect in hypertensive rats because of the peptides found in the compound, according to February 2004's Biological and Pharmaceutical Bulletin.

The one human trial published on royal jelly, found in Experientia (September 1995), showed that 50-100 milligrams (mg) daily of royal jelly can decrease total serum cholesterol levels by 14 percent and total serum lipids by 10 percent in humans with atherosclerosis.

What Are the Health Risks?
Royal jelly could prove harmful for those allergic to bee stings, honey or ragweed pollen (which is present in bee pollen). Its topical use may cause dermatitis. Royal jelly has been linked with acute asthma, anaphylaxis and death in Hong Kong where consumption is high (Clinical & Experimental Allergy, March 1997) as well as in Australia.

Other adverse reactions to royal jelly have included eczema, rhinitis, hives and bronchospasms, and pregnant women and nursing mothers are advised to avoid royal jelly.

Choosing a Royal Jelly Product
If you want to give it a try, look for freeze-dried royal jelly products. Because royal jelly's composition is nearly 70 percent water, it's highly degradable, and freeze-drying helps lock in its nutrient value. Also, since quality concerns have arisen about certain brands, you should ask your retailer for recommendations.