

Cell Protector



One protective supplement might be all you need—especially if that one supplement was actually shown to inhibit many different types of cancer, including several of the leading cancers among women.

With breast and ovarian cancer incidence on the increase, more and more women are seeking to bolster their doctor's treatment program with natural support from alternative medicine.

Following the success of Prosta-bel®, a dietary supplement currently being evaluated at Columbia University's Department of Urology in a clinical trial for men with elevated PSA, Natural

Source International is now launching a new product specially aimed at women's health.

Ladybel® is an all-natural dietary supplement that includes *Pao pereira*, *Rauwolfia vomitoria*, and *Ginkgo biloba*. All three of these plant extracts have been extensively studied for their potential contributions to women's health and, most recently, as an adjunct to chemotherapy and radiation.

INNOVATIVE APPROACH TO CANCER

During the 1970s, Mirko Beljanski, Ph.D., a former researcher with the Pasteur Institute in France, developed a new and revolutionary concept in defining the first step of abnormal expression of genetic information associated with the onset of cancer.

Beljanski was the first scientist to demonstrate that pollutants, carcinogens, and toxic molecules all interfere with the secondary structure of DNA to provoke abnormal destabilization of the double strands of this molecule, exposing new sites accessible to the enzymes in charge of gene expression and DNA duplication. He found that all DNAs isolated from cancer tissues exhibit a slight destabilization of the double helix, making them susceptible to further interference from new molecules; the destabilization of the DNA becomes cumulative and leads to unscheduled gene expression and DNA duplication.

Although it has long been common to refer to mutations (which damage the genetic code) as the primary cause of cancer, Beljanski showed that

many agents that are not mutagens may induce unscheduled DNA destabilization.

Indeed, thanks to the work of Beljanski and, more recently, Donald Malins, Ph.D., it is now better known that malignancies are caused by changes in the actual structure of the double helix, a process that occurs before the mutations in the genetic code of the DNA that deregulate protein function.

Beljanski went on to show there are plant extracts that selectively bind with the destabilized genomes from precancerous and cancerous tissues, whereas they do not disrupt the function of the DNA in healthy cells. The active compounds in the extracts of *Pao pereira* and *Rauwolfia vomitoria* intercalate between the bases of the destabilized strands of DNA, thereby preventing further DNA duplication and cancer cell growth. In a sense they are offering cellular protection long before mutations can even occur—and when we speak of cancer prevention, that just might be a very good thing.

Beljanski undertook a long series of experiments with these two extracts using cell cultures and experimental studies to demonstrate the extracts' ability to block cancer cell multiplication, while not interfering with the growth of healthy cells. Research has shown that both pao and rauwolfia inhibit breast cancer cell lines in a dose-dependent manner. Several experiments have shown the plant extracts destroy various cancer cells in mice.

Said Beljanski, "We have now tested the activity of the pao extract *in vitro* on sixteen different malignant cell lines, some of which are resistant to conventional therapy, as well as on five normal cell lines. Results presented here confirm previous ones, by showing destruction of over 90% of cancer cells (74 to 98%, depending on cell line) using maximal product concentrations...normal cells remained unaffected."

The *Pao pereira* and *Rauwolfia vomitoria* extracts have been used in Europe as natural products for fighting cancer and helping people at high risk. They have been used for over 25 years and have been very successful with people who prefer nontoxic natural extracts to traditional methods, most of which have side effects. *Pao pereira* and *Rauwolfia vomitoria* have different mechanisms of action, and there is evidence suggesting that the combination of the two extracts shows more efficacy than either one used alone.

Recent studies conducted at Columbia University Medical Center have extensively examined the mechanisms by which these two plant extracts

Diamonds might be a woman's best friend—but in a world where we are constantly assaulted by environmental carcinogens and chemical toxins, one could easily make the case that a nutritional supplement offering cellular protection is even dearer.

destroy cancer cells without having an effect on healthy cells. First, they confirmed *in vitro* studies on the selective anticancer effect of these plant extracts. Next, they focused on the mechanism by which both plant extracts kill cancer cells, and then they confirmed this on mice grafted with cancer cells. *Rauwolfia vomitoria* extract significantly suppressed cell cycle progression and overall cell growth in human prostate cell lines *in vitro* and *in vivo*, while *Pao pereira* significantly suppressed cell growth and induced apoptosis in LNCaP cell cultures, as well as in LNCaP tumor xenografts (Bemis, Capodice, Buttyan, Katz, Pao, poster American Urological Association, 2005, and personal communication).

By combining these two extracts, Ladybel provides a wide spectrum of protective regulation that promotes healthy responses in individuals who have malignancies. These extracts counteract the numerous aggressive carcinogens that pollute our environment, many of which are not detected because the most common tests focus only on mutagens.

USEFUL FOR THOSE UNDERGOING CHEMOTHERAPY AND RADIATION

Ladybel also contains a special extract of *Ginkgo biloba* leaves, quite different from the classical extract of the same plant. As shown by studies conducted both in Beljanski's lab and in collaboration with the French Army, this specific ginkgo extract provides a noticeable radio-protection of tissues submitted to ionizing radiation (radiotherapies, x-rays, cobalt therapies, mammograms) which damages the DNA of cells and induces abnormal function of multiple enzymes, inducing a painful fibrosis which may emerge long after exposure to radiation. Beljanski then showed that this ginkgo extract regulates the activity of these enzymes, especially those involved in the function of connective tissue.

Beljanski determined that the levels of ribonucleases are deregulated in many cancer patients regardless of the treatments they receive. In a sense, elevated levels of ribonucleases in the blood constitute another cancer marker like CA or PSA, and any agent that helps attenuate expression of these markers is a valuable asset in any cancer treatment. Indeed, Beljanski found that the yellow leaf ginkgo extract proved to be effective at normalizing the blood serum levels of ribonucleases in cancer patients.

The activities of these enzymes, which include ribonucleases, are also modified by exposure to

radiation, which leads to the scarring of tissues associated with fibrosis.

Ionizing radiation damages the DNA of cells and also causes burns and induces fibrosis in tissues. Fibrosis may emerge in weeks, months, or even years after radiotherapy and can be extremely painful and debilitating.

For women undergoing cancer treatments such as chemotherapy or radiation, the extracts do not impair or otherwise interfere with traditional treatments. They help the body make the best of conventional therapies and deal with the common side effects associated with the lack of selectivity of conventional therapies.

Ladybel is legally regulated as a dietary supplement for which no claims can or should be made for healing, diagnosing, or treating illnesses. The genius of Ladybel stems from the fact that Dr. Beljanski envisioned his supplements as a natural means of healthy support for women undergoing conventional treatments. The dietary supplement simply helps these treatments to be more effective by promoting the growth of healthy cells and by maintaining healthy biochemistry. ■

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Resources

If you are a consumer or health professional and have any questions or would like more information, contact Natural Source International at (888) 308-7066 (toll free) or (212) 308-7066. www.natural-source.com

Learn more about Dr. Beljanski's scientific research at the following websites:

- www.beljanski.com (this is the CIRIS site translated from French as the Scientific Center for Information, Research and Innovation)
- www.mbschachter.com
- www.pubmed.com (to view Beljanski's studies)

To find a doctor who can help you to use the Beljanski plant extracts in your program, visit the American College for Advancement of Medicine website at www.acam.org and use their physician referral service.



Doctor's Case Report (Female, born March 1963)

Dec. 1997	Diagnosed with breast cancer; Surgery (breast and nodes) Breast reconstruction and chemotherapy
June 2000	Extensive complementary supplements
Sept. 2000	Bone pain; bone metastasis
Dec. 2000	Came to Schachter Center for Complementary Medicine
April 2001	Increasing pain and bone marrow involvement; Navelbine, Herceptin
	Introduction of Beljanski program
	Pao: 9 per day Rauwolfia: 6 per day Ginkgo: 3 per day RNA primers: 3 per week
	Responded well to chemo and Beljanski: dramatic drop in CA 27-29 & clinical improvement.
	In 2006, she is still alive and battling cancer. She is currently back on chemo and is still taking Beljanski products.