Wild Blueberries Have Potential To Fight Cancer

New research findings suggest that wild blueberry compounds have the potential to attack all stages of cancer—initiation, promotion and proliferation. (Source: Journal of Food Science, 70(3):S159-S166, 2005.) According to the study, different types of wild blueberry phenolic compounds are active during different stages of cancer, resulting in a broad spectrum of potential cancer-fighting benefits.

"Wild blueberry compounds offer a multi-pronged attack against cancer," said Dr. Mary Ann Lila, Ph.D., lead researcher from the Department of Natural Resources and Environmental Sciences, University of Illinois at Urbana-Champaign. Other collaborators include John Pezzuto, Ph.D., from the School of Pharmacy, Purdue University, and Muriel Cuendet and Young-Hwa Kang from the Department of Medicinal Chemistry and Pharmacognosy, University of Illinois at Chicago.

According to Dr. Lila, cancer begins as a result of an assault on cells by free radicals leading to oxidative stress or inflammation. "We're investigating the potential of natural antioxidants like those found in wild blueberries to combat the free radical attack in the body," said Dr. Lila. "What makes it so intriguing is that in addition to free radical scavenging, wild blueberries contain other natural components that are simultaneously inhibiting cancer-promoting enzymes and blocking the growth of tumor cells. How these compounds get into the body and the mechanics of how they work is the next frontier."

According to Dr. Lila, these results build on previous work done at the University of Illinois at Urbana-Champaign, which demonstrated the positive effect of Wild Blueberry proanthocyanidins or condensed tannins on connective matrix metalloproteinases (MMPs), the enzymes that cancer cells use to degrade the surrounding connective tissue and spread in the body.

"Our research proves that specific nutrients can control pancreatic and other forms of cancer because they target the four characteristics of the disease — proliferation, invasion, new blood vessel formation, and cell survival," Dr. Lila said. "These new data call for a critical reevaluation of current approaches to cancer and a focus on the development of natural, safe, and effective means of controlling this devastating illness."

New Research Says Some Nutrients Can Inhibit Pancreatic Cancer Growth

Innovative research conducted by scientists under the direction of Aleksandra Niedzwiecki, Ph.D., at the Dr. Rath Research Institute indicates that the spread of pancreatic cancer can be inhibited with a specific nutrient combination. The research findings, published in the latest issue of the International Journal of Gastrointestinal Cancer (2005, Volume 15(2): 97-102), further validate Dr. Matthias Rath's novel approach to controlling cancer metastasis with essential nutrients.

There is no cure for pancreatic cancer, which has the poorest prognosis among cancer malignancies. Conventional approaches, including surgery, chemotherapy and radiation, have been unsuccessful reducing the high mortality rate of this disease. Dr. Rath's research team incubated the human pancreatic cell line MIA PaCa-2 with a nutrient mixture composed of vitamin C, lysine, other amino acids, and green tea to observe its effects in inhibiting the proliferation and invasion of this deadly form of cancer.

This research direction was inspired by Dr. Rath's work. In 1992, he postulated that vitamin C and lysine could act as natural inhibitors of the degradation of connective tissue, a common pathomechanism in all types of malignancies. The study results corroborated earlier research with different types of cancer and showed that the nutrient mixture exerted a significant anti-proliferative effect and completely inhibited the invasion of pancreatic cancer cells. These nutrients also reduced the secretion of matrix metalloproteinases (MMPs), the enzymes that cancer cells use to degrade the surrounding connective tissue and spread in the body.

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Americans Missing the Boat on Fitness

"People care about their health on paper, but when it comes to taking action, it's easier to just make excuses," stated Mr. McCarthy.

Obesity: Social Stigma or Health Crisis?

Older Americans are more likely to say that obesity is a social problem; younger generations are more likely to say that it is a health care problem. This suggests that, in the future, obesity will be addressed directly with medical treatment.

According to a 2004 study in the journal Obesity Research, taxpayers paid for more than half of obesity-related medical costs, which reached a total of $75 billion in 2003. As the younger generation turns to health clubs to become fit, there is hope that the public burden of obesity-related medical costs will decrease.

Holistic Health Replaces Physical Fitness

Emotional well-being topped American's priority list (97 percent), although many continue to say that maintaining good physical health is also essential or important (96 percent). The survey revealed a trend toward an overall well-being that incorporates both physical and emotional health. Attitudes toward the importance of money and career rank significantly below physical health and overall well-being at 75 and 78 percent, respectively, giving a new twist to the "me" mentality.

Current health club members cited the holistic benefits of exercise. They said that they felt better after a workout than they did before (63 percent), that exercise had a positive effect on their overall physical health (57 percent), physical appearance (52 percent), self-confidence (50 percent), and fun or enjoyment (50 percent). Members also said that fitness was just a part of their overall approach to maintaining good health (49 percent).