



After heart disease, cancer is the second leading cause of death worldwide. One in two men and one in three women will be diagnosed with some type of cancer in their lifetime. Despite novel initiatives, the American Cancer Society estimates that by 2020 the number of new cancers will increase to more than one million cases per year in men, and more than 900,000 per year in women. Melanoma, lung, breast, and prostate cancer are the most commonly diagnosed among the new cancers. Although cigarette smoking – the most common risk factor for cancer – still remains high, obesity and other metabolic disorders can contribute to and increase breast, colon, uterus, pancreas, and kidney cancers.

Scientific Focus on Anti-Cancer-Effects of Vitamin C

Conventional cancer treatments such as surgery, chemotherapy, and radiotherapy may initially seem to be effective. However, since these treatments indiscriminately attack all cells including normal and cancer cells, they have debilitating and sometimes even fatal side effects.

We know that vitamin C is a very potent antioxidant. Vitamin C helps as an anticancer agent by destroying free radicals. It also helps strengthen connective tissue along with the amino acids proline, lysine, and other nutrients. We recently published an in-depth review article about the anticancer effects of vitamin C in a recent publication of the *Journal of Cellular Medicine and Natural Health*.¹

Our review article covers the various mechanisms involved in the anti-cancer effects of vitamin C. This includes the ability of this nutrient to selectively kill cancer cells by inducing cell-suicide (apoptosis) without harming normal cells. We, and others, have shown that vitamin C induces the activity of several pro-apoptotic genes, including p53 and p21. Vita-



Vitamin C is a key molecule for the prevention and control of cancer. Its potential has been the subject of numerous studies by the Dr. Rath Research Institute and includes, inter alia, the inhibition of cancer cell growth and the inducing of natural cancer cell death.

min C is essential for the synthesis of collagen fibers and supporting tumor encapsulation, making it hard for cancer cells to escape the capsule and metastasize. Our studies (conducted in specific mice that lack the ability to produce their own vitamin C) have shown that the animals supplemented with vitamin C developed less tumors. Moreover, the tumors that developed were observed to be surrounded by a strong connective tissue capsule rendering them less invasive. We further saw that such an encapsulating effect can inhibit the spread of tumors (metastasis) by 71%. Moreover, vitamin C supports normal tissues thereby possibly decreasing the devastating side effects of chemo and radiotherapy.

Despite numerous studies illustrating the beneficial effects of vitamin C in cancer, it has still not become a mainstay of cancer treatment. A majority of studies focus on vitamin C applied as a single nutrient. We use the concept of micronutrient synergy, which supports vitamin C efficacy by targeting additional anti-cancer mechanisms.

A specific combination of vitamin C with lysine, proline, green tea extract, quercetin and others, could effectively reduce cancer cell growth, induce apoptosis, curtail invasion and metastasis of cancer, and decrease growth of the blood vessels feeding the tumor (angiogenesis). Our scientific results clearly indicate that vitamin C in combination with other micronutrients has real potential in the effective management and natural defense against cancer.

Ref:

1. MW Roomi, et al., *Journal of Cellular Medicine and Natural Health*, 2015.

Important Health Information for All

This information is provided to you courtesy of the Dr. Rath Research Institute. Led by two former colleagues of two-time Nobel Laureate Linus Pauling († 1994) this Institute has become a leader in the breakthrough of natural health research in the field of cancer, cardiovascular disease and other common diseases. The Institute is a 100% subsidiary of the non-profit Dr. Rath Foundation.

The groundbreaking nature of this research poses a threat to the multi-billion dollar pharmaceutical "business with disease." It is no surprise that over the years the drug lobby has attacked Dr. Rath and his research team in an attempt to silence this message. To no avail. During this battle, Dr. Rath has become an internationally renowned advocate for natural health saying, "Never in the history of medicine have researchers been so ferociously attacked for their discoveries. It reminds us that health is not given to us voluntarily, but we need to fight for it."

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