

True

Health is a matter of trust

Results of our research

Dr. Rath Research Institute
CUTTING-EDGE RESEARCH IN NATURAL HEALTH

Phytonutrients are natural components of plants. Their important functions include protecting the plants from insects, diseases, draught, ultraviolet rays and pollutants. Until recently, phytonutrients were not considered as important nutrients for humans; however, they are now thought to be necessary to sustain human life. It has been shown that several phytonutrients can reduce the incidence of chronic diseases such as diabetes, hypertension, atherosclerosis and cancer.

Health Protective Effects of Phytonutrients: Quercetin

Quercetin is an important natural plant component obtained from fruits and vegetables such as onions, apples, berries, and also citrus bioflavonoids. It has strong antioxidant and anti-inflammatory properties and has been found to inhibit cellular histamine release, thus leading to its potent anti-allergic actions. Quercetin is also important for maintaining strong blood vessels and can decrease the thickness of the blood, which could prevent blood clots. Furthermore, it can protect the liver and counteract the dangerous effects of artificial estrogen. Quercetin is also essential for proper absorption of vitamin C and prevents its destruction in the body.

Our research and clinical evidence shows that quercetin can help in increasing levels of available green tea phenols in blood^{1, 2}. Green tea extract is a potent anticancer agent. Since active components in green tea are not adequately absorbed from the body's digestive system, adding quercetin can markedly enhance the anticancer activity of green tea extract.

Due to its anti-inflammatory properties quercetin has been studied in a variety of diseases associated with inflammation; examples include atherosclerosis,

rheumatoid arthritis and cancer. It is most commonly used in inflammation of the bladder and prostate. We have demonstrated that a mixture containing quercetin, selected micronutrients and citrus bioflavonoids was effective in a significant reduction of various markers of systemic inflamma-



Quercetin is an important ingredient of various vegetables and fruits.

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tion. A comparative analysis with ibuprofen, an anti-inflammatory medicine, also proved that the quercetin-supplemented micronutrient combination provided better protection against inflammation than ibuprofen and resulted in reduced expression of the enzyme cyclooxygenase-2 (COX2) and other inflammatory parameters³. One of the popular COX2 inhibitor drugs, Vioxx, was removed from the market in 2004 due to it causing more than 60,000 deaths and 150,000 serious cases of heart disease. While the remaining COX2 inhibiting drugs on the market continue to carry a risk of life-threatening side effects, micronutrients are not only safe and effective but also provide additional health benefits.

Our results proved that quercetin and green tea extract were the most effective inhibitors of angiotensin II induced smooth muscle cell contraction. Angiotensin II promotes vascular spasm and increased blood pressure and its pharmacological inhibitors are therefore used to treat high blood pressure. Our results show that quercetin and green tea can inhibit this enzyme by 120% and 97%, respectively⁴.

Quercetin acts synergistically with vitamin C and green tea extract to strengthen the connective tissue. Strong connective tissue has an important function in preventing the formation and progression of atherosclerotic plaques⁵.

We have also proven the anticancer properties of quercetin in an in vivo study. This showed that the synergistic action of quercetin with other micronutrients can inhibit the growth of already developed breast cancer tumors in rats and decrease malignancy⁶.

Hence, with so many health promoting qualities, it is clear that quercetin should be an important element in our daily micronutrient regimens.

*Ref:

1. A. Kale, et al., *Phytother Res.* 2010 Jan;24 Suppl 1:548-55
2. S. Gawande, et al., *Phytother Res.* 2008, Vol. 22- 6, pp 802-808
3. V. Ivanov, et al., *Int J Mol Med.* 2008 Dec;22(6):731-41
4. V. Ivanov, et al., *5th Annual Conf. on Arteriosclerosis, Abstract #67*
5. V. Ivanov, et al., *J Cardiovasc Pharmacol.* 2008 Jul;52(1):55-65
6. A. Kale, et al., *Oncology Letters* 2010, 1: 313-317

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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