Broccoli Delivers a One-Two Punch to

Prevent Cancer Development and Progression

(NaturalNews) Broccoli is a super star member of the cruciferous family, well known and documented as an **immune boosting food** that supports the healthy clearance of aberrant cancer cells before they multiply and develop into detectable tumors. Researchers reporting in the journal Clinical Epigenetics have found that the bioactive compound in broccoli, sulforaphane provides a multi-modal attack against cancer cell development and proliferation through the complex mechanism of epigenetics.

Epigenetics refers to the way that diet, toxins and other environmental contributors can change which genes get activated, or "expressed" within our genetic code to guide the accurate replication essential to cellular metabolism and repair. This can play a powerful role in **preventing and promoting many chronic illnesses** from cancer to heart disease and other health issues. Consuming broccoli raw or lightly steamed several times each week can supply a potent dose of sulforaphane to **help prevent many types of cancer**.

Broccoli and cruciferous vegetables directly influence genetic expression to inhibit cancer.

In past research bodies, scientists have documented the pathway utilized by sulforaphane to inhibit the action of an enzyme known as histone deacetylase (HDAC inhibitor) that helps restore proper balance and helps prevent the development of cancer. Researchers at the Linus Pauling Institute at Oregon State University have uncovered a second mechanism, DNA methylation, that works in concert with HDAC inhibitors that work to maintain proper cell function. Sulforaphane from broccoli and other crucifers stimulates both HDAC and DNA methylation pathways in a synergistic fashion to prevent cancer development.

The lead study author, Dr. Emily Ho commented regarding the sulforaphane-cancer connection "Cancer is very complex and it's usually not just one thing that has gone wrong... it's increasingly clear that sulforaphane is a real multi-tasker. The more we find out about it, the more benefits it appears to have."

DNA methylation controls the healthy expression of genes. When this pathway is blocked scientists have found a significantly increased risk of conditions including **cardiovascular disease**, **immune function**, **neurodegenerative disease and even aging**. Foods that provide sulfur groups necessary for proper DNA methylation include onions, garlic, nuts and seeds. Sulforaphane from broccoli is found in this research to stimulate the methylation path to enable normal gene expression to thwart cancer cell genesis.

Nutrition experts recommend consuming one to two servings of <u>broccoli</u> (or other members of the crucifer family such as <u>cabbage</u>, <u>cauliflower</u>, <u>Brussels sprouts</u> or <u>kale</u>) **several days of the week**. A rapidly growing body of evidence demonstrates that **the natural**, **active compounds found in these vegetables help to prevent cancer and other chronic disease** by dealing a two-step knockout blow to influence gene expression.

Sources for this article include:

http://www.clinicalepigeneticsjournal.com/content/3/1/3

http://www.sciencedaily.com/releases/2012/02/120228140555.htm

http://www.eurekalert.org/pub releases/2012-02/osu-amd022812.php

http://www.medicalnewstoday.com/releases/242302.php

About the author:

John Phillip is a Health Researcher and Author who writes regularly on the cutting edge use of diet, lifestyle modifications and targeted supplementation to enhance and improve the quality and length of life. John is the author of 'Your Healthy Weight Loss Plan', a comprehensive EBook explaining how to use Diet, Exercise, Mind and Targeted Supplementation to achieve your weight loss goal.