Essentials of Health

A new meta-analysis has shown evidence in favor of a protective effect for dietary supplementation against the risk of colorectal cancer.

Supplementation with multivitamins and calcium may reduce colorectal cancer risk

Colorectal cancer is a major health concern, primarily in industrialized countries. Previous research has shown associations between some nutrients, such as calcium, and the risk of colorectal cancer. However, no systematic review or meta-analysis of prospective studies has focused on cancer risk and the use of dietary supplements specifically.

In a new study published online in the International *Journal of Cancer*, researchers analyzed 24 studies examining the association between the use of supplements and risk of colon, rectal and colorectal cancer. This meta-analysis included original and peer-reviewed relevant studies published up until January 2013.

The use of multivitamin supplements was associated with an 8% lower risk of colorectal cancer when compared to non-use of multivitamins. Subjects that used calcium supplements specifically had a 14% reduction in the risk of colorectal cancer compared to those who didn't use calcium supplements. Inconsistent associations were found for colon cancer and colorectal cancer risk and other specific supplements, which included vitamins A, C, D, E and garlic. And, contrary to some recent concerns, no negative effect was found for folic acid.

The results of this meta-analysis suggest that in addition to other lifestyle factors, multivitamins and calcium supplements may have a beneficial effect on colorectal cancer risk. This research adds to the data from previous trials and cohort studies that have consistently shown that calcium supplementation may be beneficial in colorectal cancer prevention.

Heine-Bröring RC et al. Dietary supplement use and colorectal cancer risk: A systematic review and meta-analyses of prospective cohort studies Int J Cancer. 2014 Oct 21. doi: 10.1002/ijc.29277.