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High blood levels of vitamin D are associated with a reduced risk of colorectal cancer, according to a new meta-analysis of observational studies published in the "International Journal of Cancer."

VITAMIN D LEVELS LINKED TO A REDUCED RISK OF COLORECTAL CANCER

Many epidemiological and observational studies have made a link between higher levels of vitamin D and a reduced risk of several types of cancers. A recent review was conducted to analyze blood vitamin D levels and the possible connection to colorectal, breast, and prostate cancers.

Researchers identified 35 independent studies that met criteria, and separate analyses for case-control and prospective studies were done.

A trend toward a decreased risk of breast cancer risk was associated with higher serum 25-hydroxyvitamin D, but results from prospective studies only did not support an association between vitamin D status and breast cancer. Researchers found no association between vitamin D levels and prostate cancer.

However, a consistent inverse relationship between serum vitamin D levels and colorectal cancer was found. Analysis of data from nine studies showed that for every 10 ng/ml increase in levels of vitamin D the risk of colorectal cancer decreased by 15 percent.

Researchers suggest that new randomized trials need to be organized to determine whether vitamin D status is a risk factor or a marker for colorectal cancer and how much of an increase is required to change the risk sufficiently to be useful as a public health measure.

S. Gandini et al. Meta-analysis of observational studies of serum 25-hydroxyvitamin D levels and colorectal, breast and prostate cancer and colorectal adenoma. International Journal of Cancer. 5 March 2011, Volume 128, Issue 6, pages 1414–1424.