

A new meta-analysis reveals that higher Vitamin D levels are associated with significantly reduced mortality in patients with colorectal and breast cancer.

High vitamin D levels improve survival in patients with colorectal and breast cancer

Breast cancer (BC) and colorectal cancer (CRC) are two of the most common causes of cancer death worldwide. These cancers share many of the same risk factors which include smoking, physical inactivity, poor diet, excessive alcohol consumption and obesity. The results of several studies have suggested that low vitamin D levels may be a potential risk factor for many cancers, including BC and CRC.

In a recent study published in the *European Journal of Cancer*, researchers summarized the evidence regarding a potential protective role of high Vitamin D levels with cancer mortality, and specifically among BC and CRC patients.

The comprehensive literature search included studies which analyzed the association of vitamin D with survival in breast cancer and colorectal cancer patients. The review included five studies of colorectal cancer patients (n=2,330), and five studies of breast cancer patients (n=4,413). The studies all compared mortality across two to five categories of vitamin D levels.

Among colorectal cancer patients, when compared to the category of lowest vitamin D, the group with the highest vitamin D levels had a 29% decreased risk of overall cancer mortality, and a 35% decreased mortality risk of CRC specifically. Comparing high to low vitamin D levels among breast cancer patients revealed a 38% and 42% reduction of overall cancer and BC mortality respectively.

Higher Vitamin D levels (>75nmol/L or 30 ng/dl) were associated with significantly reduced mortality in patients with colorectal and breast cancer. Our results have potential implications for vitamin D deficient patients for whom enhancement of their vitamin D status could improve their survival.

Maalmi H. et al., Serum 25-hydroxyvitamin D levels and survival in colorectal and breast cancer patients: Systematic review and meta-analysis of prospective cohort studies. *Eur J Cancer* (2014).