

A new research article published online suggests that having a higher plasma level of vitamin D is associated with a better chance of surviving colorectal cancer.

Higher vitamin D levels increase survival rate in postoperative adults with colorectal cancer

Low vitamin D levels are known to be associated with poor health outcomes or increased risk in many diseases including cardiovascular disease, diabetes, and some cancers.

In a new study published in the *Journal of Oncology*, researchers investigated whether the plasma level of vitamin D after a diagnosis of colorectal cancer (CRC) has a significant impact on survival outcome. The Scottish research team analyzed data from 1,598 adults who had undergone surgery for stage I-III colorectal cancer. Blood samples were taken after surgery and evaluated for vitamin D and for a specific Vitamin D gene receptor.

When compared to the patients with the lowest one-third of vitamin D levels, the patients whose vitamin D levels were in the top one-third of subjects had a significantly lower (32%) risk of dying of CRC and a 30% lower risk of dying from any cause during the 5 year follow-up period. In patients with stage II CRC, those in the top one-third of vitamin D levels experienced a 56% reduction in mortality.

The researchers found interactions between vitamin D levels and specific type of vitamin D gene receptor, indicating a causal relationship between vitamin D and survival.

This study shows that in patients with stage I-III colorectal cancer, higher post-surgery vitamin D levels are associated with a better outcome and a lower risk of mortality. Since this was an observational study, carefully designed clinical trials are still needed to confirm whether vitamin D supplementation would provide survival benefits for patients with colorectal cancer.

Zgaga L. Plasma Vitamin D Concentration Influences Survival Outcome After a Diagnosis of Colorectal Cancer. *J Clin Oncol*. 2014 Jul 7. pii: JCO.2013.54.5947.