

# Vitamin D for Prevention and Treatment of Colorectal Cancer: What is the Evidence?

[Ng K.](#)

## [Author information](#)

### **Abstract**

Vitamin D insufficiency is highly prevalent in the U.S., particularly among colorectal cancer (CRC) patients. These low levels of vitamin D are concerning in light of increasing evidence that vitamin D may have health benefits beyond skeletal outcomes. Prospective observational studies suggest that higher vitamin D levels are associated with lower risk of incident CRC as well as improved survival in patients with established CRC, and randomized clinical trials are desperately needed to establish causality. Moreover, there remains a great need to improve prognosis for patients with CRC, and investigating vitamin D as a potential therapeutic modality is an attractive option in regards to safety and cost, particularly in this era of expensive and often toxic anti-neoplastic agents. In this review, the available published evidence on vitamin D's activity in CRC will be summarized, spanning preclinical, epidemiological, and clinical studies, and future research directions will be discussed.

### **KEYWORDS:**

25-hydroxyvitamin D; Colorectal cancer; calcitriol; cancer epidemiology; chemoprevention; nutrition; randomized clinical trial; vitamin D; vitamin D receptor