

Remedial and beneficial effects of Calcium on colorectal cancer

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To The Editor

Cancers start when cells in the body begin to uncontrolled growth. Cells in nearly any part of the human body can become cancer, and can spread to other areas of the body. Colorectal cancer (CRC) is a term for cancer that starts in either the colon or the rectum. Cancer of the colon and rectum have many features in common. Unfortunately, CRC is the third most common cancer and the fourth leading cause of cancer-related death in the world, with an estimated occurrence of 1233700 new cases and a mortality of 608700 deaths annually based on the statistics in 2008 (1).

Specific components of Western diet including consumption of red and processed meat and saturated dietary fat have been proposed to increase susceptibility to colorectal cancer or neoplasm (2,3). Also epidemiological studies have shown that environmental factors, and especially diet, play an important role in susceptibility to sporadic colon cancer (4).

Calcium supplements and non-dairy products fortified with calcium may serve as additional targets in the prevention of CRC and also randomized controlled trials (RCTs) of calcium supplements with at least 10 years of follow-up are warranted to confirm a benefit of calcium supplements on CRC risk (5). Researchers showed increased dietary fat can promote colon cancer by increasing the levels of free ionized fatty acids and bile acids in the colon contents also ions of calcium can reduce the irritating and toxic factors of the free acids on colon epithelial cells by converting to insoluble calcium soaps (6). Also Korean Researchers indicate calcium consumption have an inversely related to colorectal cancer risk therefore calcium intake decreases risk of CRC (7). Other study was expressed that higher intake of calcium was associated with a reduction of colorectal adenoma prevalence (8). Likewise higher post-diagnosis intakes of total calcium and milk may be

associated with lower risk of death among patients with non-metastatic CRC (9).

Due to this review calcium have remedial effects on treatment and reduction of colorectal cancer

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