

Higher intakes of dietary carotenoids such as beta-carotene, lycopene, lutein and zeaxanthin may be associated with a significant reduction in prostate cancer risk.

Carotenoids linked to lower rate of prostate cancer

The dietary carotenoid lycopene, which gives tomatoes and watermelon their red color, has been associated with a lower risk of prostate cancer in western countries where the nutrient is often consumed in tomato sauce, pizza and ketchup. A study, published in the International Journal of Cancer, examined 404 men in southeast China, where dietary patterns differ from those of western countries and the rate of prostate cancer is low.

The researchers found an inverse association between prostate cancer and intake all of the dietary carotenoids examined, which included lycopene, alpha-carotene, beta-cryptoxanthin, lutein and zeaxanthin. Tomatoes, pumpkin, spinach, watermelon and citrus fruits were associated with reduced prostate cancer risk.

Subjects whose reported lycopene intake was in the top one-fourth of participants had an 82 percent lower risk of prostate cancer than those whose intake was in the lowest quarter. Those with the highest beta-carotene intake had a 66% reduction in risk, and men with the highest lutein and zeaxanthin intakes were nearly 100 percent less likely to develop prostate cancer than those whose intake was the lowest.

Results from this study suggest that diets high in vegetables and fruits rich in lycopene and other carotenoids may be protective against prostate cancer.

Jian L et al. Do dietary lycopene and other carotenoids protect against prostate cancer? Int J Cancer. 2005 Mar 1;113(6):1010-4.