



NUTRITION / DETOXIFICATION

## Prostate Cancer Risk

*MEN PRACTICING A VEGAN DIET SHOW SIGNIFICANT REDUCTION.*

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A large study published in January 2016 in the *American Journal of Clinical Nutrition* showed that men who are vegans had a 35% lower risk of developing prostate cancer compared to non-vegan men. The study followed more than 26,346 men who are part of the Adventists Health Study-2. During the study, 1079 men developed prostate cancer. Researchers showed that with regard to the total population of men (26,346), those who followed a vegan diet had a 35% lower risk of developing prostate cancer compared to non-vegans. This was especially true for white males, with a similar trend for black male vegans, although the association was not quite as strong.<sup>1</sup>

### Findings Not Surprising

These findings should not be all that surprising, as a number of previous studies have shown that a high intake of animal fat from beef, pork and dairy products and/or saturated fat, is associated with an increased risk for prostate cancer, as is a high intake of trans-fats, total fat and the presence of obesity. The evidence also shows that a higher intake of omega-3 fats has potentially a protective effect against prostate cancer.<sup>2</sup>



In addition, the intake of various plant-based foods, which would be main features of a vegan diet, contain known cancer protective constituents - many of which have been shown to inhibit the development of prostate cancer in experimental studies, and some of which have been used in human clinical trials as successful adjuncts to slow or reverse cancer progression in men with established prostate cancer or precancerous lesions within the prostate.

Here are some examples of plant-based foods with anti-cancer constituents shown to inhibit the development and/or progression of cancer:

- Cruciferous vegetables (broccoli, Brussels sprouts, cabbage, cauliflower, bok choy) - these vegetables contain the anti-cancer indole-3 carbinol and sulforaphanes that exhibit multimodal anti-cancer effects with respect to prostate cancer and other cancers.<sup>3</sup>
- Tomatoes - contain the carotene known as lycopene, which demonstrates multimodal anti-cancer effects against prostate cancer, and has been used in clinical studies to slow or reverse the progression of localized prostate cancer in human studies.<sup>4,5</sup>
- Soy beans and soy products - soy beans contain isoflavones and the Bowman-Birk protease inhibitor, which exhibit multimodal anti-cancer effects in prostate cancer research. Soy isoflavone supplements have also been used to slow/reverse the progression of localized prostate cancer in human clinical studies.<sup>6</sup>
- Peas and Beans - contain lignins, phytates and protease inhibitors, which exhibit various anti-cancer properties.<sup>7</sup>
- Green Tea - the catechins (polyphenols) in green tea demonstrate impressive anti-cancer properties in regard to prostate cancer and other cancers. Thus far, two human clinical studies have shown the ability of green tea catechin supplementation to prevent the progression of

precancerous prostate lesions, and to improve the management of localized prostate cancer in a human clinical study.<sup>8,9</sup>

- Pomegranate Juice – pure pomegranate juice contains ellagic acid, which is an important anti-cancer constituent. Two human prostate cancer studies have shown the ability of 8 ounces of pure pomegranate juice per day to help improve the management (lowering the PSA level) in advanced cases of prostate cancer.<sup>10</sup>
- Ground Flaxseed – contain the precursors to enterolactone and enterodiol, which are unique phytoestrogens. These agents have been shown to slow the proliferation of prostate cells and slow the replication of prostate cancer cells in men awaiting prostate cancer surgery.<sup>11</sup>

## Summary

The results of the Adventists Health Study-2 provide additional support to the body of evidence showing that specific plant foods contain important anti-cancer nutrients that offer protection against prostate cancer. Equally important is the avoidance of high animal fats that are rich in saturated fat, as well as the consumption of too many trans-fats. It's not realistic to think that all men are going to switch to a vegan diet, but nudging men forward to consume leaner animal products (chicken and turkey breast and low-fat dairy products) that contain less saturated fat, as well as cutting out deep fried foods and reducing other sources of trans-fats, while regularly including plant-based foods that contain proven anti-prostate cancer constituents, appears to be a prudent and practical strategy to recruit many more men into a prostate prevention diet and lifestyle plan. As prostate cancer accounts for 27% of all male cancers and is the second leading cause of cancer death in men in our society,<sup>1</sup> I believe it is important for health practitioners to share these findings with their male patients and encourage them to adopt these protective lifestyle modifications.

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