Tomato-Rich Diet May Protect Against Prostate Cancer

News I September 04, 2014 I Genitourinary Cancers, Prostate Cancer **By Anna Azvolinsky, PhD**



A new study found that tomato-rich diets could lower the risk of prost... smart_paging_autop_filtersmart_paging_filter Men who increased their consumption of fruits and vegetables—tomato products in particular—had a lower overall risk of prostate cancer, according to the results of a new study, which was published in *Cancer Epidemiology*, *Biomarkers & Prevention*.

Men who followed recommendations to eat a diet rich in plant foods had a 9% lower overall risk of prostate cancer for each incremental increase of vegetable consumption (P = .04). Men who consumed more than 10 portions per week of tomato-based foods, including tomato juice and baked beans, had an 18% lower risk of developing localized prostate cancer. Vanessa Er, PhD, of the School of Social and Community Medicine at the University of Bristol and Bristol Nutrition BRU, and colleagues at the University of Cambridge and University of Oxford in the United Kingdom assessed whether following dietary recommendations by the World Cancer Research Fund (WCRF) and the American Institute for Cancer Research (AICR) could help to specifically prevent prostate cancer.

The researchers compared 1,806 prostate cancer patients, who were diagnosed using prostate-specific antigen (PSA) screening, with 12,005 controls who took part in the United Kingdom–based Prostate Testing for Cancer and Treatment (ProtecT) trial. All of the study participants were between the ages of 50 and 69. The team created a prostate cancer dietary index that included three dietary factors—selenium, calcium, and lycopene-containing foods—that were previously strongly linked with risk of prostate cancer.

Men in the study self-reported detailed daily food intake, including portion sizes.

The decrease in risk of prostate cancer as a result of eating a diet rich in tomato-based foods is thought to be due to lycopene, a carotenoid pigment and phytochemical commonly found in

tomatoes and some other red fruits and vegetables. Lycopene is known to have antioxidant properties.

"While lycopene is more bioavailable in tomato products as a result of food processing and preparation, men should consume pizza, tomato sauce, and baked beans in moderation due to their high salt, sugar, and fat content," stated the authors.

A high consumption of fruits and vegetables, particularly cruciferous vegetables, has been linked to decreased prostate cancer incidence and progression in some studies. Still, the literature on this is inconsistent, as other studies have found no link between high vegetable and fruit consumption and prostate cancer risk. Further studies are needed to confirm these findings.

"Men should still eat a wide variety of fruits and vegetables, maintain a healthy weight, and stay active," said Er in a statement.

The study did not find a link between calcium and selenium consumption and prostate cancer risk. According to the authors, this may be due to self-reporting and a lack of detailed information on the dosage and frequencies of these supplements, which may have been underestimated.

While adherence to the authors' prostate cancer dietary index resulted in a decreased risk of prostate cancer, this study did not provide evidence for a decreased risk of the cancer upon adherence to the WCRF/AICR recommendations.

Higher intake of lycopene-containing foods was also recently found to be associated with a lower risk of aggressive prostate cancer, and was linked with a lower risk of breast cancer in postmenopausal women.

- See more at: http://www.cancernetwork.com/genitourinary-cancers/tomato-rich-diet-may-protect-against-prostate-cancer#sthash.Al1GeZnQ.dpuf