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Mediterranean Diet May Decrease Risk of Prostate Cancer Progression

Men with localised prostate cancer who reported a baseline dietary pattern that more closely follows the key principles of a Mediterranean-style diet fared better over the course of their disease, according to a study published in the journal *Cancer*.

"Men with prostate cancer are motivated to find a way to impact the advancement of their disease and improve their quality of life," said Justin Gregg, MD, University of Texas M. D. Anderson Cancer Center, Houston, Texas. "A Mediterranean diet is non-invasive, good for overall health and, as shown by this study, has the potential to affect the progression of their cancer."

After adjusting for factors known to increase risk of cancer getting worse over time, such as age, prostate-specific antigen (PSA), and tumour volume, men with a diet that contained more fruits, vegetables, legumes, cereals, and fish had a reduced risk of their prostate cancer growing or advancing to a point where many would consider active treatment.

The researchers also examined the effect of diabetes and statin use and found a similar risk reduction in these patient groups.

The study, whose largest number of participants were white, also found that the effect of a Mediterranean diet was more pronounced in African American participants and others who self-identified as non-white. These findings are significant as the rate of prostate cancer diagnosis is more than 50% higher in African American men, who also have a higher risk of prostate cancer death and disease progression.

"The Mediterranean diet consistently has been linked to lower risk of cancer, cardiovascular disease, and mortality," said Carrie Daniel-MacDougall, PhD, University of Texas M. D. Anderson Cancer Center. "This study in men with early stage prostate cancer gets us another step closer to providing evidence-based dietary recommendations to optimise outcomes in cancer patients, who along with their families, have many questions in this area."

The study followed 410 men on an active surveillance protocol with Gleason grade group 1 or 2 localised prostate cancer. All study participants underwent a confirmatory biopsy at the beginning of the study and were evaluated every 6 months through clinical exam and laboratory studies of serum antigen PSA and testosterone. Trial participants were 82.9% Caucasian, 8.1% Black and 9% other or unknown. The median age was 64 years, 15% of the men had diabetes, and 44% used statins.

The men completed a 170-item baseline food frequency questionnaire, and Mediterranean diet score was calculated for each participant across 9 energy-adjusted food groups. The participants were then divided into 3 groups based on adherence to the diet (high, medium, and low).

After adjustments for age and clinical characteristics, researchers saw a significant association between high baseline diet score and lower risk of cancer grade progression. For every 1-point increase in the Mediterranean diet score, researchers observed a >10% lower risk of progression. After a median follow-up of 36 months, 76 men had disease progression.

The study was limited by the low number of events in these men with mostly low risk disease monitored at MD Anderson. Future research is needed to see if the same effects are seen for larger and more diverse patient groups and men with higher-risk prostate cancer.

"Our findings suggest that consistently following a diet rich in plant foods, fish, and a healthy balance of monounsaturated fats may be beneficial for men diagnosed with early-stage prostate cancer," said Dr. Gregg. "We are hopeful that these results, paired with additional research and future validation, will encourage patients to adopt a healthy lifestyle."

Reference: https://acsjournals.onlinelibrary.wiley.com/doi/epdf/10.1002/cncr.33182

SOURCE: University of Texas M. D. Anderson Cancer Center

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