Omega-3 and Prostate Cancer: Examining the Evidence

Saint Luke’s Mid America Heart Institute researchers question the purported link between fish oil supplements and an increased risk of prostate cancer

KANSAS CITY, Mo. (March 20, 2014) — Consumption of long chain omega-3 fatty acids – from fish oil and fish oil supplements – have long been considered to provide a variety of health benefits. However, recent articles in the mainstream media have suggested that rather than providing a health benefit, consumption of omega-3 fatty acids can actually cause an increased risk for prostate cancer and are now advising against the consumption of fish oil and fish oil supplements. Researchers at Saint Luke’s Mid America Heart Institute question the validity of those reports and are urging caution and further review before abandoning fish oil supplements.


“The Brasky study has several limitations,” said Dr. DiNicolantonio. “The most serious limitation being the study was not a randomized trial and thus cannot prove that the consumption of fish oil supplements or the consumption of fish causes prostate cancer.”

Dr. DiNicolantonio cites additional limitations to the study including the fact that the study did not measure omega-3 status in red blood cells, a marker for chronic omega-3 consumption, and the fact that the difference in omega-3 blood levels between the case and control groups were very minimal.

In the Mayo Clinic Proceedings article, Saint Luke’s Mid America Heart Institute researchers state a comprehensive review of the literature does not implicate the consumption of fish or fish oil supplements with prostate cancer. Rather, the literature indicates a likely reduction in the risk of prostate cancer, as well as other cancers, a reduction in prostate cancer mortality, and even overall
mortality with the consumption of fish and fish oil supplements. In addition, examination of populations with a lifelong high consumption of fish, such as the Japanese and the Inuit, reveal very low rates of prostate cancer and prostate cancer mortality.

Mid America Heart Institute researchers also reviewed data from in-vitro studies and studies in mice that indicate that EPA/DHA have prostate cancer inhibiting properties.

“Fish oil supplements, as well as consumption of fish, have decades of evidence for reducing the risk of recurrent myocardial infarction, sudden death, as well as cardiovascular death and all-cause mortality in those who have experienced a heart attack, and reducing the risk of death in those with heart failure,” said Dr. DiNicolantonio. “It would be a shame if patients stopped their fish oil supplements based on the Brasky study and recent media reports. There is no proof that fish or fish oil supplements cause prostate cancer.”

The complete article may be found at http://www.mayoclinicproceedings.org/article/S0025-6196(13)01000-8/fulltext and video of Dr. James DiNicolantonio at http://youtu.be/VLskU379T14

About Saint Luke’s Mid America Heart Institute
Saint Luke’s Mid America Heart Institute, a member of Saint Luke’s Health System and a teaching affiliate of the University of Missouri-Kansas City, is one of the preeminent cardiovascular programs in the country. Its legacy of innovation began more than 25 years ago when it opened as the nation’s first heart hospital. Since then, the Heart Institute has earned a worldwide reputation for excellence in the treatment of heart disease, including interventional cardiology, cardiovascular surgery, imaging, heart failure, transplant, heart disease prevention, women’s heart disease, electrophysiology, outcomes research, and health economics. With more than 50 full-time board-certified cardiovascular specialists on staff, the Heart Institute offers one of the largest heart failure/heart transplant programs in the country, has the largest experience with transcatheter aortic valve replacement in the Midwest, and is a global teaching site for the newest approaches to opening challenging blocked arteries using minimally invasive techniques.

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