

On May 16, 2007, a group of investigators led by Karla Lawson reported in the Journal of the National Cancer Institute on the association between multivitamin use and the risk of prostate cancer. The National Institutes of Health—AARP Diet and Health Study which enrolled 295,344 men aged 50 – 71 years, has had 6 years of follow-up. The main finding of the study was an increased risk of advanced and fatal prostate cancer (relative risk 1.32) among men reporting excessive use of multivitamins (more than once a day) when compared with never users. Most important, the increased risks with excessive multivitamin use were only in men who reported taking other single supplements, including selenium, beta-carotene, vitamin E and folate or zinc, or in men with a family history of prostate cancer. The risk for advanced prostate cancer was associated with supplement “abuse”, which means using many dietary supplements at levels well above their daily requirement. There were no associations of multivitamin use with local prostate cancer, and multivitamins taken once per day or less were not associated with any increased risk. The authors concluded, “These results suggest that regular multivitamin use is not associated with the risk of early or localized prostate cancer. The possibility that men taking high levels of multivitamins along with other supplements have increased risk of advanced and fatal prostate cancer is of concern and merits further evaluation.”

SELECT Participants

Participants in SELECT (Selenium and Vitamin E Cancer Trial) should be aware that the SELECT Coordinators have made the following recommendations:

1. There is no evidence that *daily use* of the multivitamin provided by SELECT affects the risk of getting prostate cancer or its aggressiveness.
2. Participants taking other multivitamins in addition to the SELECT multivitamin should consult their primary care physician about any risks associated.
3. SELECT guidelines recommend that participants be screened yearly by digital rectal exam and PSA. Those who receive yearly screening have a very small risk of developing fatal prostate cancer within 6 years of study entry, based on results of the Prostate Cancer Prevention Trial and other screening studies.
4. Prior large scale randomized, placebo-controlled trials have shown a protective effect of selenium on the risk of developing prostate cancer (Lippman et al. J Natl Cancer Inst 97:94-102). SELECT participants may continue to take their SELECT supplements.
5. Both an increased and decreased risk of prostate cancer have been associated with zinc intake. SELECT participants should avoid using zinc supplements at a high dose of over 100 mg/day if they are also taking the SELECT multivitamin. The SELECT multivitamin contains 15 mg of zinc, which is 100% of the daily value.