

Multivitamins not effective for preventing cancer in elderly, study reveals

Medical Dialogues Editorial Team

In a new study conducted by Howard D Sesso and team it was found that when compared to a placebo, a daily multivitamin-multimineral (MVM) supplement did not substantially lower the risk of total cancer in older men and women. The findings of this study were published in *The American Journal of Clinical Nutrition*.

Although multivitamin-multimineral supplements are routinely used by older persons to maintain health, research on the effectiveness of daily MVMs on invasive cancer is sparse. As a result, the goal of this study was to see if a daily MVM reduces overall invasive cancer in older persons.

A randomized, placebo-controlled, double-blind, two-by-two factorial trial of a daily MVM and cocoa extract for cancer and cardiovascular disease (CVD) prevention among 21,442 U.S. adults (12,666 women aged 65 years and 8776 men aged 60 years) free of major CVD and recently diagnosed cancer was conducted. The intervention period lasted from June 2015 until December 2020. Participants were randomized to either daily MVM or placebo at random. Total invasive cancer, excluding non-melanoma skin cancer, was the main outcome. Secondary outcomes were major site-specific malignancies, total CVD, all-cause mortality, and overall cancer risk in individuals with a cancer history.

The key findings of this study were as follow:

1. Invasive malignancy occurred in 518 people in the MVM group and 535 participants in the placebo group with a median follow-up of 3.6 years.
2. A daily MVM had no influence on breast or colorectal cancer, from the findings of this work.
3. A daily MVM was found to have a preventive effect against lung cancer.
4. The composite CVD result occurred in 429 MVM group participants and 437 placebo group participants. MVM had no discernible effect on all-cause mortality.

5. There were no concerns about safety.

In conclusion, daily multivitamin-multimineral (MVM) supplementation did not lower the risk of total invasive cancer, and cocoa extract does not lower the risk of total cardiovascular events in older persons. Future research is required to investigate the impact of MVMs on additional aging-related outcomes in older persons.

Reference:

Sesso, H. D., Rist, P. M., Aragaki, A. K., Rautiainen, S., Johnson, L. G., Friedenberg, G., Copeland, T., Clar, A., Mora, S., Moorthy, M. V., Sarkissian, A., Wactawski-Wende, J., Tinker, L. F., Carrick, W. R., Anderson, G. L., Manson, J. E., Manson, J. E., Sesso, H. D., ... Rist, P. M. (2022). Multivitamins in the prevention of cancer and cardiovascular disease: The COSMOS randomized clinical trial. In *The American Journal of Clinical Nutrition*. Oxford University Press (OUP). <https://doi.org/10.1093/ajcn/nqac056>