

IADSA SCIENTIFIC RESPONSE- IADSA SCIENTIFIC ALERT SERVICE

Issue: Study reported that women who regularly take multivitamin supplement were 19 % more likely to develop breast cancer

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Title: Multivitamin use and breast cancer incidence in a prospective cohort of Swedish women

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Study conclusions:

A prospective observation study examined the association between multivitamin use and the incidence of breast cancer among 35,329 women in the Swedish Mammography Cohort. The data on multivitamin use and other breast cancer risk factors were collected with a self-administered questionnaire. During a mean follow-up of 9.5 years, usage of multivitamin was associated with a statistically significant increased risk of 19% for breast cancer incidence. The multivariable relative risk of breast cancer did not differ significantly by hormone receptor status of the breast tumor.

Responses:

1. The findings from other large studies did not show an increased association of cancer incidence with people who regularly take multivitamins supplements. The Women's Health Initiative¹ which followed up 68,132 women for a median period of eight years showed there was no association of multivitamin use with the risk of cancer using multivariate-adjusted analyses. A population-based case-control study published in 2009 found no association between multivitamin supplement use and breast cancer risk in women². In another study involving 37,920 US women with an average of 10 years follow-up, the results show that multivitamin use was not significantly associated with the overall risk of breast cancer³.
2. According to the authors, the findings did not prove that multivitamin supplements were the cause for an increased incidence in breast cancer. This is due to several limitations of the study, details on types of multivitamins used were not available. Also, using self-administered questionnaire to obtain data about multivitamin use is prone to recall bias which leads to inaccuracies.

3. It is likely that the combination of various factors such as unhealthy lifestyle and individual predisposition that put the women at increased risk to cancer.
4. Readers should note that researchers emphasised that, on an individual basis, the risk remains small and the vast majority of woman vitamin users will not develop cancer.
5. It is noted that multivitamins can complement our modern day diet which is often imbalanced in nutrition. In view of the substantial scientific support for the use of multivitamins within safe upper limit in the context of a healthy lifestyle and diet, a person should continue to take his or her multivitamin supplements.

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References

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3. Ishitani K, Lin J, Manson JE, et al. A prospective study of multivitamin supplement use and risk of breast cancer. *Am J Epidemiol.* 2008; 167: 1197-206.