

Aspirin boosts breast cancer survival rate

February 17 2010, by Lin Edwards



Coated aspirin tablets. Image: Wikimedia Commons.

(PhysOrg.com) -- An observational study of 4,164 women diagnosed with breast cancer showed those taking aspirin in the period after diagnosis had a much lower rate of recurrence, and a much higher survival rate than those who did not.

The study analyzed the use of [aspirin](#) by women who had been diagnosed with stage 1, 2 or 3 [breast cancer](#) between the years 1976 and 2002. All participants were taking part in the Nurses' Health Study, which followed 238,000 nurses in the US for three decades. The women were followed until their death or the cut-off date of June 2006. During this period 341 of the women died of breast cancer, and 400 had metastases or their cancer returned. The women who were taking aspirin were taking it for other conditions, and most were taking low-dose aspirin to ward off stroke and heart attacks.

Dr Michelle Holmes, Associate Professor of Medicine and Epidemiology at Harvard Medical school, who carried out the study, found a 50 per cent reduction in the risk of death during the follow-up period in women taking aspirin. The best results were for those taking aspirin between two and five days a week (71% reduction), while those taking it six to seven days had a slightly lower (64%) reduction. Overall, taking aspirin gave the women a 50 per cent reduction in the risk of death, and also reduced the risk of the cancer returning. Non-steroidal anti-inflammatory drugs (NSAIDs), including [naproxen](#) and ibuprofen, also reduced the risks.

The study was observational and therefore does not establish definitive cause and effect or explain how aspirin reduces the risks, and the data only revealed the number of days the women took aspirin, and not the dosage. Holmes said the findings agree with the results of some earlier studies. She said that we are beginning to realize that “cancer is an inflammatory disease, and aspirin is an anti-inflammatory.” It may work by lowering the blood level of estrogens, or could prevent the early spread of cancer in some way, Holmes said.

Holmes said that aspirin has negative effects in some people and can cause bleeding in the gastrointestinal tract, and it should never be used as a substitute for traditional cancer treatments. As the paper, published online yesterday in the *Journal of Clinical Oncology*, notes there may be some skewing of the results since women are advised to stop taking aspirin during chemotherapy, and this could result in an over-estimation of the benefits of aspirin. More study and clinical trials will be needed to confirm the findings, but if women with breast cancer are taking aspirin for other conditions they may also be helping to prevent their cancer from returning.

More information: Aspirin Intake and Survival After Breast Cancer, *J. Clin. Oncol.* 0: JCO.2009.22.7918v1.

[DOI:10.1200/JCO.2009.22.7918](https://doi.org/10.1200/JCO.2009.22.7918)

© 2010 PhysOrg.com

Citation: Aspirin boosts breast cancer survival rate (2010, February 17) retrieved 20 May 2023 from <https://medicalxpress.com/news/2010-02-aspirin-boosts-breast-cancer-survival.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.