

# Study Links Acetaminophen to Lower Prostate Cancer Risk

## Researchers Say Too Early to Justify Use to Reduce Risk, but Could Provide Biological Clues

ATLANTA – May 23, 2011 – A new study from American Cancer Society researchers finds use of 30 tablets a month or more of acetaminophen for five or more years was associated with an estimated 38% lower risk of prostate cancer. The study appears in *Cancer Epidemiology Biomarkers and Prevention* and is one of only two studies of prostate cancer to date that have examined the association with acetaminophen use that was both long-term and regular.

Use of aspirin and other nonsteroidal anti-inflammatory drugs (NSAIDs), particularly long-term use, has been associated with modestly reduced risk of prostate cancer in some previous epidemiologic studies. Acetaminophen, a commonly used pain-reliever, is not traditionally considered an NSAID but can have anti-inflammatory effects.

For the current study, researchers led by Eric Jacobs, Ph.D., American Cancer Society epidemiologist, examined the association between acetaminophen use and prostate cancer incidence among 78,485 men in the Cancer Prevention Study II Nutrition Cohort. Information on acetaminophen use was obtained from a questionnaire completed at study enrollment in 1992 and updated using follow-up questionnaires in 1997 and every two years thereafter.

During follow-up from 1992 through 2007, there were 8,092 incident prostate cancer cases identified. Current regular use of acetaminophen ( $\geq 30$  pills per month) for 5 years or more was associated with lower risk of overall prostate cancer (RR = 0.62, 95% CI 0.44-0.87) as well as lower risk of aggressive prostate cancer (RR = 0.49, 95% CI 0.27-0.88). Current regular use of  $< 5$  years duration was not associated with prostate cancer risk.

“While the results of this observational study suggest that long-term regular acetaminophen use may be associated with lower prostate cancer risk, our findings require replication by other studies, and do not justify use of acetaminophen to prevent prostate cancer. Acetaminophen is considered relatively safe when used at recommended doses but unintentional acetaminophen overdose is an important cause of acute liver failure.” said Dr. Jacobs. “Still, results of this study could lead to further research on acetaminophen that might provide biological insights about the process of prostate cancer development and how this process could be slowed.”

Article: “A Large Cohort Study of Long-term Acetaminophen Use and Prostate Cancer Incidence,” Eric J Jacobs, Christina C Newton, Victoria L Stevens, and Susan M Gapstur; *Cancer Epidemiol Biomarkers Prev* May 17, 2011 cebp.0210.2011; Published OnlineFirst May 17, 2011; [doi:10.1158/1055-9965.EPI-11-0210](https://doi.org/10.1158/1055-9965.EPI-11-0210)

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