

# Long-term use of vitamin E may decrease COPD risk

16 May 2010

Long-term, regular use of vitamin E in women 45 years of age and older may help decrease the risk of chronic obstructive pulmonary disease (COPD) by about 10 percent in both smokers and non-smokers, according to a study conducted by researchers at Cornell University and Brigham and Women's Hospital.

"As lung disease develops, damage occurs to sensitive tissues through several proposed processes, including inflammation and damage from free radicals," said Anne Hermetet Agler, doctoral candidate with Cornell University's Division of Nutritional Sciences. "[Vitamin E](#) may protect the lung against such damage."

The results of the study will be presented at the ATS 2010 International Conference in New Orleans.

"The findings from our study suggest that increasing vitamin E prevents COPD," said Ms. Agler. "Previous research found that higher intake of vitamin E was associated with a lower risk of COPD, but the studies were not designed to answer the question of whether increasing vitamin E intake would prevent COPD. Using a large, randomized controlled trial to answer this question provided stronger evidence than previous studies."

Ms. Agler and colleagues reviewed data compiled by the Women's Health Study, a multi-year, long-term effort ending in 2004 that focused on the effects of aspirin and vitamin E in the prevention of cardiovascular disease and cancer in nearly 40,000 women aged 45 years and older. Study participants were randomized to receive either 600 mg of vitamin E or a placebo every other day during the course of the research.

Although fewer women taking vitamin E developed COPD, Ms. Agler noted the supplements appeared to have no effect on asthma, and women taking vitamin E supplements were diagnosed with

asthma at about the same rate as women taking placebo pills. Importantly, Ms. Agler noted the decreased risk of COPD in women who were given vitamin E was the same for [smokers](#) as for non-smokers.

Ms. Agler said further research will explore the way vitamin E affects the lung tissue and function, and will assess the effects of vitamin E supplements on lung diseases in men.

"If results of this study are borne out by further research, clinicians may recommend that women take vitamin E supplements to prevent COPD," Ms. Agler noted. "Remember that vitamin E supplements are known to have detrimental effects in some people; for example vitamin E supplementation increased risk of congestive heart failure in cardiovascular disease patients. Broader recommendations would need to balance both benefits and risks. "

Provided by American Thoracic Society

APA citation: Long-term use of vitamin E may decrease COPD risk (2010, May 16) retrieved 24 September 2022 from <https://medicalxpress.com/news/2010-05-long-term-vitamin-decrease-copd.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.*