

## Doctor, I am healthy and over the age of 70, should I take aspirin to prevent death, dementia, and physical disability?

In healthy people over the age of 70, taking a low-dose aspirin daily does not prolong survival, reduce risk of dementia or physical disability, and it may increase risk of major bleeding. These results do not apply to people who have already been diagnosed with heart disease or stroke.

## Study highlights

Taking an aspirin a day (100 mg) in healthy elderly persons (above the age of 70) did not reduce death, dementia, or physical disability over a period of 5 years. (91% of the people in this study were Caucasian therefore the results may not apply to people from other ethnic backgrounds).



## What's the issue?

### Understanding the problem

You may have seen advertisements that promote aspirin as a medication for heart disease. Indeed, aspirin is an important medication for people having a heart attack and to prevent another heart attack or stroke in people who have already had one. But what about healthy older people? Is it a good idea for them to take an aspirin a day?

In this study, researchers investigated whether there was a health benefit in taking a daily aspirin for people over age 70 who are living in the community who have never had a stroke or heart attack.



## The study

**Who?** The study included 19,114 people who were over the age of 70 (mean age 74; 56% women) from the US or Australia who had none of the following:

- Heart disease (e.g. heart attack or angina or heart failure)
- Stroke
- Dementia
- Physical disability (defined as severe difficulty or inability to perform any of the following activities of daily living: bathing, dressing, toileting, transferring, walking, feeding)

**What?** The study measured the rate of death, dementia and persistent (longer than 6 months) physical disability in people who took aspirin compared to people who took placebo.

Aspirin	vs	Placebo
Aspirin 100 mg once a day		Placebo: A pill containing an inactive substance that has no effect on the outcome. Sometimes, it is referred to as a "sugar pill."



## Summary of findings

Outcomes at 4.7 Years (19,114 People)	Rate of events with Aspirin	Rate of events with Placebo	Results
<b>Primary Outcome*</b>	10 out of 100 people	10 out of 100 people	No difference
• Death from any cause	5 out of 100 people	5 out of 100 people	No difference
• Dementia	3 out of 100 people	3 out of 100 people	No difference
• Physical disability	2 out of 100 people	2 out of 100 people	No difference
<u>Major bleeding</u>	4 out of 100 people	2 out of 100 people	About 2 more people out of 100 had <u>major bleeding</u> while taking aspirin

\*The primary outcome is a combination of any of the following: death from any cause, dementia, or physical disability.

This Evidence Summary is based on the following article:

McNeil JJ, Woods RL, Nelson MR, et al. **Effect of Aspirin on Disability-free Survival in the Healthy Elderly.** *N Engl J Med.* 2018 Oct 18;379(16):1499-1508. doi: 10.1056/NEJMoa1800722. Epub 2018 Sep 16. PubMed (<https://pubmed.ncbi.nlm.nih.gov/30221596>)

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