

## Aspirin in Primary Prevention. Is it Necessary?

*Aspirina en prevención primaria. ¿Es necesaria?*

Cardiovascular disease is a concept that includes heart and vascular conditions. Primary prevention refers to actions aimed at preventing the onset of cardiovascular disease, while secondary prevention tries to avoid further cardiovascular events after its first occurrence.

### WHAT ARE ANTIPLATELET DRUGS?

Initially, aspirin was used to relieve pain, fever, and inflammation. The use of aspirin was boosted in the 1970s, as several studies reported that it could help to reduce the chance of heart attacks and strokes through its action as anti-platelet agent, mainly in those patients who had already suffered an event. Aspirin is prescribed to prevent the effect of clots in the arteries by reducing platelet activity. Platelets are necessary to prevent bleeding after a wound, but may be dangerous if a thrombus develops inside an artery (for example, inside heart arteries).

### RESEARCH EVIDENCE ON THE USE OF ASPIRIN IN PRIMARY PREVENTION ASPIRIN FOR EVERYONE?

Recent research studies evaluated the role of aspirin, which has been used for more than a century.

The ARRIVE study, published in *The Lancet*, assessed 12,546 patients in 7 countries, and found out that aspirin did not help to prevent the first event in patients at moderate cardiovascular risk.

The ASCEND study, published in the *New England Journal of Medicine*, assessed the use of aspirin in 15,480 persons with diabetes. In that population, the small benefit provided by aspirin was counterbalanced by higher total and brain bleeding hazard.

Finally, in the ASPREE trial, published in the *New England Journal of Medicine*, conducted on 19,114 adults over 70 years of age, with no prior cardiovascular episodes, aspirin did not prolong their healthy and independent life span (free from dementia or persistent physical disability). The rates of coronary heart disease, non-fatal heart attacks, and fatal and non-fatal ischemic stroke were similar in both the aspirin and placebo groups.

Another major finding of the study was that aspirin also may cause major bleeding events in people with perfect health.

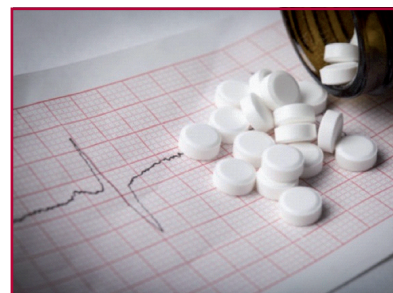
### ASPIRIN AND CANCER PREVENTION

So far, the information available from clinical trials on this topic remains somewhat controversial. For this reason, and given the short follow-up time of patients so far, data analysis should be interpreted with caution.

### CONCLUSION

Aspirin should not be proactively prescribed to healthy people with no cardiovascular problems; it should be indicated only to those patients who have suffered a cardiovascular event.

Therefore, the conclusion would be: "If you are healthy, you should not take aspirin."



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