

Good and bad news on aspirin and colon cancer: study

September 6 2017



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Daily aspirin use—known to reduce the risk of colon cancer—could also make the disease harder to treat if it does occur, researchers reported Wednesday.

The new findings based on [mathematical modelling](#), If confirmed

statistically and in the lab, would mean that aspirin's ability to ward off colon [cancer](#) may come at an unacceptably high cost, they cautioned.

Taking aspirin regularly "has been shown to reduce the incidence (of) a variety of cancers," including of the colon, noted the authors of a study in the *Journal of the Royal Society Interface*.

But at the same time, the drug may render the cancer "more difficult to manage therapeutically," they added.

"This indicates a potential trade-off."

A growing body of research has shown that daily micro-doses of aspirin taken for at least five years can slash the risk of cancer later in life.

Rates of prostate, throat and [non-small-cell lung cancer](#) all drop off significantly, with the incidence of colon cancer cut by up to half.

Other studies, meanwhile, have tested the impact of aspirin directly on [cancer cells](#) in the laboratory, showing that the common painkiller can slow the rate of cell division and boost cell death.

But scientists do not yet understand the mechanism at work, or know whether aspirin might have as-yet-undiscovered effects on cancer spread.

To find out more, researchers led by Dominik Wodarz of the University of California at Irvine—who conducted these earlier experiments—investigated whether the drug may cause dangerous cancer mutations.

Lasting benefits

Indeed, aspirin did boost the cancer's ability to produce aggressive, mutant cells that are drug-resistant, they found.

The results could challenge the protocol for aspirin use in cancer prevention.

It is now critical to ensure that aspirin delays "the onset of colorectal cancer by a sufficient amount of time to avoid the negative effects of this trade-off," the study authors said.

People who take the drug, especially in middle age, should be regularly screened for cancer, they added.

Roughly half of adults in the United States take small doses—80 to 325 milligrammes—of aspirin to ward off cardiovascular disease. In Britain the figure is about 40 percent.

The general public has not yet recognised the potential benefits for cancer prevention, notes Peter Rothwell, a professor at the Centre for Prevention of Stroke and Dementia at the University of Oxford.

"It takes a while, and more replication studies, to convince people that the benefits are real," he told AFP.

Rothwell published a study earlier this year showing an increased risk of internal bleeding in people over 75 who take [aspirin](#) regularly.

"You might want to take it in your 50s and 60s, but then stop," he told AFP.

"The benefits you get from [cancer prevention](#) carries on for another 10 years or so."

More information: Effect of aspirin on tumor cell colony formation and evolution, *Journal of the Royal Society Interface*, [rsif.royalsocietypublishing.org1098/rsif.2017.0374](https://royalsocietypublishing.org/doi/10.1098/rsif.2017.0374)

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