

ASPIRIN LOWERS RISK OF COLORECTAL, OTHER DIGESTIVE TRACT CANCERS

According to this study:

- Aspirin use is inversely related to the risk of colorectal and other digestive tract cancers.
- This favorable effect tends to increase with longer use, and, for colorectal cancer, increasing dose.

Aspirin has long been associated with a reduced risk of colorectal cancer and, possibly, other digestive tract cancers. The optimal duration and dose for cancer prevention, however, aren't certain. Researchers updated a 2012 systematic review and meta-analysis of observational studies of the chemopreventive role of aspirin in digestive tract cancers.

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A total of 113 case-control, nested case-control, and cohort studies published through March 2019 were included in the analysis. The studies showed a significant reduction in the risk of colorectal cancer among those taking aspirin regularly compared with those who did not use aspirin. A linear dose-risk relationship was found: an aspirin dose of 75 to 100 mg per day reduced the risk of colorectal cancer by 10%, whereas a dose of 325 mg per day reduced the risk by 35%, and a dose of 500 mg per day reduced it by 50%. Aspirin also reduced

the risk of squamous cell esophageal cancer, adenocarcinoma of the esophagus and gastric cardia, stomach cancer, hepatobiliary tract cancer, and pancreatic cancer. Risk estimates were consistent across sex, geographical area, and other covariates. The favorable effect tended to increase with longer duration of use. Overall, there was no association between aspirin use and head and neck cancers.

The authors note that there are inherent biases in observational studies. In this study, the associations were somewhat stronger in case-control compared with cohort studies, and there was some heterogeneity between studies, with differences in populations, baseline cancer risk, aspirin dose, prevalence of aspirin use, and other factors.

Bosetti C, et al. *Ann Oncol* 2020;31(5):558-68.

IS VIDEO GAME ADDICTION REAL?

According to this study:

- Most adolescents have relatively few pathological video game symptoms.
- For some, pathological gaming can result in sustained negative behavioral and mental health outcomes.

Most adolescents play video games without experiencing negative developmental outcomes. Yet, for a small percentage, video game play can become pathological, disrupting healthy functioning. Because most studies of video gaming have been cross-sectional and lasted from one to two years, it isn't known whether pathological gaming is a long-lasting issue or if it resolves over time. A longitudinal study examined the trajectories of pathological video game players across six years, from early adolescence to emerging adulthood.

Participants included 385 adolescents ages 14 to 16 years at baseline (53% were female). Each year for six years, participants completed several questionnaires assessing depression, anxiety, aggression, and other measures of pathological gaming.

Three distinct trajectories were identified. Approximately 10% of participants were categorized in Class 1, defined by the researchers as "increasing symptoms." They had the highest levels of pathological video game symptoms at baseline, and their symptoms increased over six years. Class 2 comprised the 18% of participants who had "moderate symptoms" at baseline that didn't change over time. Class 3, referred to as "non-pathological," comprised the 72% of participants whose few initial pathological symptoms increased slightly at year 3 but decreased afterward.

Participants in the increasing and moderate symptom groups were significantly more likely to be male than those in the non-pathological group, and the increasing symptom group scored significantly lower on prosocial behavior than the moderate symptom group. Both the increasing and moderate symptom groups had higher levels of aggression, depression, and shyness compared with the non-pathological group, and the increasing symptom group had higher problematic cell phone use and anxiety than the non-pathological group.

A small number of adolescents and emerging adults may have a gaming disorder, and even those with moderate symptoms may have long-lasting effects, the authors conclude. They also note that the study was limited by a small sample size and relied heavily on self-report.

Coyne SM, et al. *Dev Psychol* 2020 Apr 30. Online ahead of print.