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## Sedentary behavior increases the risk of certain cancers

Physical inactivity has been linked with diabetes, obesity, and cardiovascular disease, but it can also increase the risk of certain cancers, according to a study published June 16 in the *JNCI: Journal of the National Cancer Institute*.

To assess the relationship between TV viewing time, recreational sitting time, occupational sitting time, and total sitting time with the risk of various cancers, Daniela Schmid, Ph.D., M.Sc., and Michael F. Leitzmann, M.D., Dr.P.H., of the Department of Epidemiology and Preventive Medicine, University of Regensburg, Germany, conducted a meta-analysis of 43 observational studies, including over 4 million individuals and 68,936 cancer cases. Data in the individual studies had been obtained with self-administered questionnaires and through interviews.

When the highest levels of sedentary behavior were compared to the lowest, the researchers found a statistically significantly higher risk for three types of cancer—colon, endometrial, and lung. Moreover, the risk increased with each 2-hour increase in sitting time, 8% for colon cancer, 10% for endometrial cancer, and 6% for lung cancer, although the last was borderline statistically significant. The effect also seemed to be independent of physical activity, suggesting that large amounts of time spent sitting can still be detrimental to those who are otherwise physically active. TV viewing time showed the strongest relationship with colon and endometrial cancer, possibly, the authors write, because TV watching is often associated with drinking sweetened beverages, and eating junk foods.

The researchers write “That sedentariness has a detrimental impact on cancer even among physically active persons implies that limiting the time spent sedentary may play an important role in preventing cancer....”

In an accompanying editorial, Lin Yang and Graham A. Colditz, M.D., Dr.P.H., of the Siteman Cancer Center and Department of Surgery, Washington University School of Medicine, St. Louis MO, write that these results “...support a causal relation between sedentary behavior and both colon and endometrial cancers.” They comment that cancer prevention requires good evidence, political will, and a social strategy to fund and implement prevention programs.

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