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### FITNESS MAY AFFECT RISK OF LUNG, COLORECTAL CANCER AND LIKELIHOOD OF SURVIVAL AFTER DIAGNOSIS

**MAY 6, 2019** - In a recent study, adults who were the most fit had the lowest risk of developing lung and colorectal cancer. Also, among individuals who developed lung or colorectal cancer, those who had high fitness levels before their cancer diagnosis were less likely to die compared with those who had low fitness levels. The findings are published early online in *CANCER*, a peer-reviewed journal of the American Cancer Society.

There is limited data on the relationship between cardiorespiratory fitness and lung and colorectal cancer risk and mortality. To investigate, Catherine Handy Marshall, MD, MPH, of Johns Hopkins School of Medicine, and her colleagues studied 49,143 adults who underwent exercise stress testing from 1991–2009 and were followed for a median of 7.7 years. The study represents the largest of its kind, as well as the first of its kind to involve women and a large percentage of non-white individuals. Those in the highest fitness category had a 77 percent decreased risk of developing lung cancer and a 61 percent decreased risk of developing colorectal cancer. Among individuals who developed lung cancer, those with the highest fitness had a 44 percent decreased risk of dying during follow-up, and among adults who developed colorectal cancer, those with the highest fitness had an 89 percent decreased risk.

“Our findings are one of the first, largest, and most diverse cohorts to look at the impact of fitness on cancer outcomes,” said Dr. Handy Marshall. “Fitness testing is commonly done today for many people in conjunction with their doctors. Many people might already have these results and can be informed about the association of fitness with cancer risk in addition to what fitness levels mean for other conditions, like heart disease.”

Additional studies are needed to expand on these results and to determine if improving fitness can influence risk and mortality rates of cancer.

*Full citation:* Catherine Handy Marshall, Mouaz H. Al-Mallah, Zeina Dardari, Clinton A. Brawner, Lois E. Lamerato, Steven J. Keteyian, Jonathan K. Ehrman, Kala Visvanathan, and Michael J. Blaha. “Cardiorespiratory Fitness and Incident Lung and Colon Cancer in Men and Women: Results from the Henry Ford Exercise Testing (FIT) Cancer Cohort”. *CANCER*. 2019; doi.org/10.1002/cncr.32085

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