Being active reduces risk of prostate cancer

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Prostate cancer is the most common cancer in men in the UK , yet we still don't know all of its causes. The largest ever study to use genetics as a measurement for physical activity to look at its effect on prostate cancer, reveals that being more active reduces the risk of prostate cancer. Over 140,000 men were included in the study, of which, 80,000

had prostate cancer.

This new study, published in the *International Journal of Epidemiology* today [5 December], was led by the University of Bristol and co-funded by World Cancer Research Fund (WCRF) and Cancer Research UK (CRUK). It found that people with the variation in their DNA sequence that makes them more likely to be active, had a 51 per cent reduced risk of prostate cancer than people who did not have this particular variation. Importantly, the findings relate to overall physical activity, not just intense exercise.

WCRF's own evidence has already shown that being active can reduce the risk of bowel, breast and womb cancer, but the evidence of physical activity on prostate cancer was limited. But this large study, which uses genetics as a proxy measurement for physical activity, shows that being active may in fact have a large impact on prostate cancer risk. To date there has been little evidence of ways to reduce prostate cancer risk other than maintaining a healthy weight.

Dr. Sarah Lewis, Senior Lecturer in Genetic Epidemiology at Bristol Medical School: Population Health Sciences, and lead author of the research, said: "This study is the largest-ever of its kind which uses a relatively new method that complements current observational research to discover what causes prostate cancer. It suggests that there could be a larger effect of physical activity on prostate cancer than previously thought, so will hopefully encourage men to be more active."

Dr. Anna Diaz Font, Head of Research Funding at WCRF, said: "Up till now, there has only been limited evidence of an effect of physical activity on prostate cancer. This new study looked at the effect of 22 risk factors on prostate cancer, but the results for physical activity were the most striking. This will pave the way for even more research, where similar methods could be applied to other lifestyle factors, to help

identify ways men can reduce their risk of prostate cancer."

This new type of study that combines genetics, lifestyle and cancer risk, supports previous evidence from observational studies that being active can reduce the risk of cancer.

More information: 'Appraising causal relationships of dietary, nutritional and physical-activity exposures with overall and aggressive prostate cancer: two-sample Mendelian randomisation study based on 79,148 prostate cancer cases and 61,106 controls' by Sarah Lewis et al in *International Journal of Epidemiology*

Provided by University of Bristol