

## Lifetime intense physical activity may lower risk for non-Hodgkin lymphoma

May 1 2015

Performing vigorous physical activity over one's lifetime may lower risk for non-Hodgkin lymphoma (NHL). These study results were published in *Cancer Epidemiology*, *Biomarkers & Prevention*, a journal of the American Association for Cancer Research

Because not much is known about what causes non-Hodgkin lymphoma, identifying risk factors is particularly important for the prevention and control of this cancer, according to Terry Boyle, PhD, a postdoctoral fellow in the Department of Cancer Control Research at the B.C. Cancer Agency and the School of Population and Public Health at the University of British Columbia in Canada. There is evidence that people who are physically active have a lower risk of some cancers such as colon and breast cancers, but not many studies have investigated whether being physical active is associated with the risk of non-Hodgkin lymphoma. How the Study Was Conducted: Boyle and colleagues used data from a case-control study conducted between 2000 and 2004 in British Columbia (BC), which recruited 820 NHL patients (59 percent men) of various ages from the B.C. Cancer Registry and 848 randomly selected controls matched for age, gender, and residential location, from the Client Registry of the British Columbia Ministry of Health.

Information on demographics and various risk factors for NHL, including <u>lifetime</u> recreational physical activity, was collected using a questionnaire. Participants were asked to record the average number of days per week and average number of hours per day they performed mild, moderate, or <u>vigorous physical activity</u> for each decade of life.



The researchers assigned a metabolic-equivalent (MET) value to the different types of physical activity, and calculated the average number of MET-hours per week of physical activity for each participant's lifetime, taking into account both the duration and intensity of physical activity.

Study participants who were in the higher (second, third, and fourth) quartiles of vigorously intense physical activity performance in their lifetimes had about 25 percent to 30 percent lower risk for NHL, compared with those who were in the lowest (first) quartile of vigorously intense physical activity. Physical activity was not associated with greater benefit for any specific age group.

In an interview, Boyle said, "In this case-control study, we found that the most physically active participants had a lower risk for NHL than the least active participants. We found that vigorous-intensity physical activity in particular, such as activities that increase breathing and heart rates to a high level, was the most effective at lowering risk. We know that being physically active reduces the risk of colon cancer and breast cancer, and also leads to a range of other physical and mental health benefits. Our findings suggest that people who do vigorous physical activity may also have a lower risk for NHL. Currently, there isn't enough research on this topic to be able to confidently say that being physically active reduces the risk of non-Hodgkin lymphoma, so we are planning to pool data from several studies to investigate this topic further. We know that different types of NHL may have different risk factors, so we are also planning to investigate whether physical activity influences the risk for different types of NHL in different ways."

## Provided by American Association for Cancer Research

Citation: Lifetime intense physical activity may lower risk for non-Hodgkin lymphoma (2015, May 1) retrieved 3 May 2024 from



https://medicalxpress.com/news/2015-05-lifetime-intense-physical-non-hodgkin-lymphoma.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.