



The healthy aging Corner

Part of Parke County's Healthy Aging and Cancer Prevention Initiative

To Fight the Flu, Don't Exercise Too Much

David J. Waters, Cheri L. Suckow

Scientific evidence says exercise of moderate intensity and frequency can help you win the battle against viral respiratory infections

Viral respiratory infections represent the most common infectious diseases affecting men and women. The seriousness of these infections ranges widely. A little scrape with a rhinovirus can land you a common cold. A more serious encounter with an influenza bug can land you in the hospital or even worse. Vaccination programs against influenza are designed to fend off widespread viral havoc. But a large percentage of the adult population never receives flu vaccine and even those persons who are vaccinated, especially the elderly, are not always afforded complete protection against getting the flu.

We need some extra muscle to fight the flu situation. Now, an emerging body of research is pointing to a practical, potentially important strategy to reduce your risk of influenza: *Exercise can beneficially affect the way your body fights off viruses.* In a study of cause of death in more than 24,000 adults, people who engaged in moderate frequency exercise – defined as at least 30 minutes duration for at least once per month up to 3 times per week – significantly lowered influenza-associated mortality compared to those who never exercised. If exercise is a good thing, can we get too much of a good thing? The research says “YES”. The same study showed adults who exercised more than 3 times per week died from flu just as often as people in the never-exercising group. *Too much exercise was as bad as none at all.*

Just how exercise improves your odds of surviving influenza is being actively investigated. Insight on how it works comes from studies of mice experimentally challenged with influenza virus. Moderate exercise (but not strenuous exercise) in mice seems to help the immune system respond in a more favorable way. The right amount of exercise orchestrates a balance between an initial inflammatory response (which enables your body to recognize and dispose of the virus) followed by a second phase that dampens the system to avoid a dangerous overreactivity. You don't want a too weak or a too strong response to virus challenge. Exercise that is too intense or too frequent baffles this balance, putting you at higher risk for life-threatening influenza.

The association between influenza and exercise presents a sticky situation. It seems that being glued to the treadmill is as bad as being glued to the couch. This season when flu bugs are making the rounds, use exercise in moderate amounts to boost your immunity. That way you can decrease the odds of being stuck with a bug.

Sources: Wong et al, Is exercise protective against influenza-associated mortality? PLoS One 2008; 3: 1-6; Martin et al, Exercise and respiratory tract viral infections. Exercise Sports Sci Rev 2009; 37: 157-64.

The Healthy Aging Corner is prepared by health professionals and researchers at the Gerald P. Murphy Cancer Foundation in West Lafayette, IN. Look for The Healthy Aging Corner to provide a glimpse at the most recent research exploring ways we can live longer and healthier lives. Supported by the Parke County Cancer Prevention Fund of the Gerald P. Murphy Cancer Foundation.