New Methods for Preventing Colds & Flu?

IOA Affiliates Bruce Barrett (Assoc. Prof., Family Medicine), Mary Hayney (Prof., School of Pharmacy), and Chris Coe (Prof., Psychology; all from UW-Madison) were among the investigators in a recent clinical trial studying two methods of preventing acute respiratory infections (ARI). ARI, or colds and flu, are among the most costly of human illnesses, resulting in numerous medical visits and lost days of school and work, and in extreme cases, hospitalization, pandemics, and death. Currently available treatments are not very effective and preventive strategies, other than hand-washing, are limited and unproven.

Evidence has suggested that stress can compromise the immune system and that stressed people are more likely to experience colds and flu. Further, stress may accelerate aging and some immune processes decline with age. Both meditation and exercise can reduce stress, and exercise can stimulate the immune system. This study investigated whether meditation or exercise would result in fewer ARI episodes among 150 participants over the age of 50.

Participants were randomly assigned to either 8 weeks of meditation or exercise training, or to a control group who received

IOA Affiliate JoAnne Robbins (Prof., Dept. Medicine, UW-Madison & Assoc. Dir. for Research, VA GRECC) was awarded the Honors of the American Speech-Language-Hearing Association (ASHA). The Honors is ASHA’s most prestigious award, given to members whose work has changed the course of their profession. Prof. Robbins is the founder and Director of the UW/VA Swallowing, Speech, and Dining Enhancement program (SSWAL-ADE), and is known nationally and internationally as a leader in the area of dysphagia, or swallowing disorders. Declines in swallowing ability are associated with normal aging, as well as with aging-related diseases such as stroke. In her work, Dr. Robbins has developed innovative diagnostic and therapeutic interventions to prevent and treat these age-related swallowing problems.
neither. Those not in the control group got 2.5 hours of training a week and engaged in 45 minutes of daily practice. Mindfulness meditation training sought to create a state of nonjudgmental awareness, attentiveness to one’s thoughts and emotions, and heightened sensitivity to bodily sensation, based on the idea that this increased awareness may lead to a healthier mind-body response to stress. Those in the exercise group engaged in moderate intensity sustained exercise, such as jogging, biking, fast walking, swimming, or using stationary bikes or treadmills.

Participants also reported frequency of ARI episodes, and completed a telephone survey assessing severity of their symptoms, including presence of headaches, body aches, fever, runny nose, sneezing, etc. Data on healthcare visits and missed work days was also collected.

Results showed substantial reductions in ARI among those in the exercise group and even greater benefits for those who received meditation training. The incidence, duration, and severity of ARI were 29%, 43%, & 31% less in the exercise group, respectively, and 33%, 43%, & 60% less in the meditation group, as compared to the control group (see above chart). Although not all the results attained statistical significance, the magnitude of reduction of ARI episodes was believed to be clinically significant. There were also 48% fewer work days missed in the exercise group and 76% fewer in the meditation group for ARI-related absences, indicating that if these results are confirmed in future studies, they may have important implications for the workplace, as well as for health-related policy.

For more information, a video of a presentation on this subject by Prof. Barrett can be viewed at: aging.wisc.edu/outreach/2011_colloquium/regist_postevent.php


Meditation and exercise may help prevent colds and flu by reducing stress.