November 10<sup>th</sup>, 2010

New research shows a strong correlation between regular aerobic exercise and reduced risk of upper respiratory tract infections.

## **REGULAR EXERCISE REDUCES RISK OF THE COMMON COLD**

Upper Respiratory Tract Infections (URTI) can be caused by more than 200 different viruses, and it is estimated that the U.S. population suffers more than one billion colds a year (2-4 per average adult, 6-10 per average child). A number of lifestyle factors contribute to URTI risk, including poor nutrient status, lack of sleep, and stress. A new paper published in the British Journal of Sports Medicine adds exercise habits to the list of lifestyle factors affecting URTI risk.

1,023 subjects between 18 and 85 years of age were recruited for this study, with 1,002 individuals completing all study requirements. Subjects were selected from multiple BMI groups (roughly one-third were of normal weight, one-third were overweight, and one-third were obese) to ensure adequate representation. A comprehensive validated survey on lifestyle, diet, activity levels, stress, and URTI incidence and severity was completed by each study participant.

After controlling for potential cofounders, total days with URTI symptoms were 43-46% lower in the highest third of aerobic activity when compared to the lowest third, while URTI severity was reduced 32-41% for the high group. Low stress levels, high exercise frequency ( $\geq$ 5 days/week), and high fruit intake ( $\geq$ 3 servings/day) also correlated with reduced URTI incidence.

The exact mechanism by which aerobic exercise reduces URTI risk is still uncertain, although it appears to be a combination of factors, including transient increases of certain immune cell types, a reduction of stress hormones, and specialized benefits to key organs (particularly the lungs, which serve as a primary barrier against URTIs).

Nieman DC, Henson DA, Austin MD, Sha W. Upper respiratory tract infection is reduced in physically fit and active adults. 2010. Br J Sports Med, ePub ahead of print. doi:10.1136/bjsm.2010.077875

ssentials of

health