

Get Moving: Hypertension and Exercise

Meta-analysis of 54 studies demonstrates “impressive” blood pressure lowering effect of aerobic exercise.

Regular aerobic exercise should be considered an important part of the treatment and prevention of high blood pressure. This is what researchers found after analyzing 54 randomized, controlled clinical studies on 2,419 participants that looked at the effects of aerobic exercise on blood pressure.

Hypertension – high blood pressure – is a major public health problem in the United States, affecting nearly 50 million Americans. It is a major risk factor for heart disease, our nation’s top killer. High blood pressure, defined as a blood pressure of over 140/90, is considered a controllable risk factor, because weight loss, exercise, and medications can help reduce blood pressure. However, to-date, no research has looked across multiple studies at *how much effect* physical aerobic activity* has on lowering blood pressure.

Physical inactivity, or a sedentary lifestyle, is also a major *controllable* risk factor for heart disease and research has shown that inactive people have a 30-50% greater risk of developing high blood pressure.

This research, comparing many previous studies, demonstrates that aerobic exercise has an *impressive effect* on lowering blood pressure both in people with hypertension *and* normal blood pressure. Across the studies, aerobic activity lowered systolic and diastolic blood pressure on average 3.8 and 2.6 points, respectively. Researchers emphasized that even this seemingly small decrease in the population’s average blood pressure could dramatically reduce the risk and incidence of, and death from heart disease.

Researchers recommend that aerobic exercise be an important strategy in the prevention and treatment of hypertension in the U.S.

**Aerobic activity is generally defined as moderate, sustained exercise for at least 20 minutes. It elevates the heart rate and reduces pressure in the blood vessels through a variety of physiological mechanisms.*

References:

Whelton, SP, Chin, A, Xin, X, He, J. (2002). Effect of Aerobic Exercise on Blood Pressure: A Meta-Analysis of Randomized, Controlled Trials. *Annals of Internal Medicine*, 136: 493-503.

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