

# SCIENTIFIC RESEARCH

## **The Effects of Transcendental Meditation on Cardiovascular Disease and Longevity: Studies Funded with \$20 Million from the National Institutes of Health**

### **Extended Longevity (*American Journal of Cardiology*, May 2005)**

This study was a first-of-its-kind long-term, randomized trial. It evaluated the death rates of 202 men and women, average age 71, who had mildly elevated blood pressure. Subjects in the study participated in the Transcendental Meditation program; behavioral techniques, such as mindfulness or progressive muscle relaxation; or health education. The study tracked subjects for up to 18 years. The study found that the Transcendental Meditation technique reduced death rates by 23%.

### **Reduced BP and Reduced Use of Hypertensive Medication (*American Journal of Hypertension*, January 2005)**

This long-term, clinical trial evaluated 150 men and women, average age 49, with stage I hypertension (average blood pressure 142/95 mm Hg). Blood pressure in the Transcendental Meditation group reduced by nearly 6 mm diastolic pressure and 3 mm systolic pressure. In contrast, blood pressure in the progressive muscle relaxation group and conventional health education classes reduced by 3 mm diastolic pressure, with no change in systolic pressure. Use of hypertensive medication was also found to significantly decrease in the TM group in comparison with controls.

### **Reduced BP in At-risk Teens (*American Journal of Hypertension*, April, 2004)**

This \$1.5M, four-year, randomized, controlled study found that adolescents at risk for heart disease experienced decreased blood pressure as a result of the daily practice of Transcendental Meditation.

### **Reduced Atherosclerosis (*American Journal of Cardiology*, April 2002)**

This study found that older Americans with multiple risk factors for cardiovascular disease substantially reduced atherosclerosis through a multi-modality treatment program derived from a traditional system of natural medicine that included the daily practice of the Transcendental Meditation technique. In the study, 57 seniors were randomly assigned to 3 treatment groups. After one year, carotid intima-media thickness (IMT) decreased significantly more in the subjects who were randomly assigned to the TM group.

### **Reduced Thickening of Coronary Arteries (*Stroke*, March 2000)**

A study found that the daily practice of the TM technique reduced the thickening of coronary arteries in hypertensive adults, thereby decreasing the risk of heart attack and stroke. After 6 to 9 months, carotid intima-media thickness decreased in the TM group as compared with matched control subjects. This reduction was similar to that achieved by lipid-lowering drugs and extensive lifestyle changes.

### **Reduced Constriction of Blood Vessels (*Psychosomatic Medicine*, July 1999 and January 1999)**

A study of middle-aged adults reported that the TM technique reduced blood pressure by reducing constriction of the blood vessels (vasoconstriction), thereby decreasing the risk of heart disease. A separately published study on adolescents with high normal blood pressure found that randomly assigned subjects who practiced the TM technique exhibited greater decreases in resting blood pressure, vascular resistance, and stress reactivity from pre-to post-treatment, compared with controls.

### **Reduced Hospitalization Rates (*American Journal of Managed Care*, 1997)**

An eleven-year study of Blue Cross/Blue Shield statistics on 693 participants in a prevention-oriented health care program that included the daily practice of the TM technique found that the group had 92% lower hospitalization rates for heart and vascular diseases as compared with matched controls.

### **Reduced Blood Pressure: Comparisons with Other Procedures (*Hypertension*—the American Heart Association's journal—November 1995 and August 1996)**

Clinical studies of older African Americans found that the TM program was 1) as effective as anti-hypertensive drugs in reducing blood pressure, 2) twice as effective as progressive muscle relaxation in lowering hypertension, and, 3) significantly effective in reducing blood pressure for both men and women in all five major risk categories, including obesity, high alcohol use, low exercise levels, psychological stress, and high salt intake.