

Meditation Helps Teens Lower Blood Pressure

Daily Transcendental Meditation Eases Tension, Lowers Blood Pressure

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April 2, 2004 -- Getting a teenager to sit still and meditate for 15 minutes twice a day may be a challenge in itself, but a new study shows the health rewards may be worth the effort.

Researchers found African-American adolescents at risk for hypertension in adulthood were able to lower their blood pressure through daily transcendental mediation.

The study showed that adolescents with high-normal systolic blood pressure who practiced meditation for four months lowered both their systolic blood pressure (the top number in a blood pressure reading) by an average of 3.5 points and their diastolic blood pressure (the bottom number) by an average of 3.4 points.

“Even if your blood pressure comes down a few millimeters when you are young, if you can maintain that into adulthood, you can significantly reduce your risk for cardiovascular disease,” says researcher Vernon Barnes, PhD, a physiologist at the Medical College of Georgia, in a news release.

Researchers say African Americans suffer disproportionately from high blood pressure compared with whites and developing blood pressure-lowering interventions that target young African Americans could provide lasting health benefits.

Meditation Lowers Blood Pressure

In the study, published in the April issue of the *American Journal of Hypertension*, researchers randomly divided 156 inner-city high school students with systolic blood pressure readings in the highest percentile into two groups. One group was instructed in transcendental mediation and meditated for 15 minutes twice a day, every day, for four months. The others acted as a comparison group and participated in health education classes.

Both groups wore 24-hour blood pressure monitoring devices that measured their blood pressure levels every 20 minutes during the day and every 30 minutes at night.

Researchers found that the transcendental mediation group steadily lowered their

daytime blood pressure during the study period and that their blood pressures tended to stay lower four months after the study ended. The students in the health education group experienced no significant changes in blood pressure.

In addition, the study showed that heart rates among those in the meditation group also dropped.

Although the mechanisms behind how meditation works to lower blood pressure aren't completely understood, researchers say the practice has well-known stress-relieving benefits.

“Allowing your mind to go to that state of inner quietness and be there for a time has an effect on the physiology by reducing stress hormone levels like cortisol and reducing activation of the sympathetic nervous system which controls the fight-or-flight response,” says Barnes. “In a short time, we can teach this standardized meditation method that has been taught all over the world for 50 years. That technique can then be used throughout a lifetime without side effects or additional expense.”

SOURCES: Barnes, V. *American Journal of Hypertension*, April 2004; vol 17: pp 366-369. News release, Medical College of Georgia.

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