

# Strength Training Normalizes Resting Blood Pressure In 65 To 73 Year Old Men And Women With High Normal Blood Pressure.

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## **OBJECTIVE:**

This study sought to determine the effects of heavy resistance strength training (ST) on resting blood pressure (BP) in older men and women. Eleven sedentary, healthy older men (age 69 +/- 1 year) and ten sedentary, healthy older women (age 68 +/- 1 year) participated in six months of progressive whole body ST performed 3 days per week.

One-repetition maximum (1 RM) strength was measured for seven different exercises before and after the ST program. Resting blood pressure (BP) was measured on six separate occasions before and after ST for each subject.

## **RESULTS:**

Substantial increases in 1 RM strength were observed for upper body and lower body muscle groups for men and women. The ST program also led to significant reductions in systolic BP in men (134 +/- 3 vs 127 +/- 2 mm Hg,  $P < .01$ ), but not in women (128 +/- 3 vs 125 +/- 3 mm Hg,  $P < .01$ ). Diastolic BP was reduced following training in both men (81 +/- 3 vs 77 +/- 1, mm Hg,  $P = .054$ ) and women (78 +/- 2 vs 74 +/- 2 mm Hg,  $P = .055$ ).

## **SUMMARY:**

Six months of heavy resistance ST may reduce resting BP in older persons. Since the changes in resting BP noted in the present study represent a shift from the high-normal to the normal category, heavy resistance ST could play a role in reducing BP for older adults with BP in the high-normal range.

## **KEISER PIECES USED:**

Keiser K-300 air-powered resistance machines.

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