

# Does Strength Training Lead to Increases in Physical Activity Levels in the Elderly?

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## **OBJECTIVES:**

Some researchers speculate that changes in body composition with strength training are due to increases in physical activity levels outside of training. To test this theory, 21 sedentary men & women 65-75 years of age were studied before and after a 24 week (3 times per week) total body strength training program using Keiser machines. Total daily physical activity and estimated energy expenditure were recorded during a 4 day period at the beginning, middle, and end of training.

## **RESULTS:**

Both men and women substantially increased their 1 repetition maximum strength, and significantly increased their fat free mass. However, there were no significant changes in percent body fat. Total daily physical activity and estimated energy expenditure did not change significantly for the overall sample or within each gender. Some increases were noted in the resting metabolic rate of the men only.

## **SUMMARY:**

Changes in body composition with strength training do not appear to be connected to increases in physical activity levels outside of training. Therefore the changes are a direct result of the strength training program.

## **KEISER PIECES USED:**

Leg press, chest press, leg curl, lat. pull down, shoulder press, hip adductor, hip abductor, upper back, tricep, lower back, abdominal.

Published in Medicine and Science in Sports and Exercise, 1995 Copyright American College of Sports Medicine.