Effects of Strength Training On Body Composition In Older Men

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OBJECTIVES:
The effects of 16 weeks of strength training on total body composition and regional composition (arms, legs and trunk) was tested in 13 untrained, healthy men aged 50-75 years. Three separate body compositions tests were used (DEXA, MRI, HYDRO), and hormone levels were also assessed. A group of 9 men who did not strength train, were also pre and post tested as a control group.

RESULTS:
The strength training program resulted in an average increase in strength of 41%. The fat mass was reduced in the arms, legs and trunk, with a simultaneous increase in lean mass in each of these areas. In addition, total body fat mass decreased and total lean body mass increased. The strength and body composition of the control group of 9 men showed no changes. The hormone levels showed no changes in either group.

SUMMARY:
Strength training decreases regional and total fat mass and increases regional and total lean mass in older men. These changes are not related to changes in hormone levels. An increase in lean body mass and decrease in fat mass can help prevent obesity and it's complications. These changes in body composition also help older adults maintain physical function and prevent frailty.

KEISER PIECES USED:
Leg press, chest press, leg curl, leg extension, lat pull down, shoulder press, upper back, hip abductor, triceps and abdominal machines.

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Note Another study titled, "Effects Of Strength Training on Total and Regional Body Composition in Older Men", was conducted to confirm the results of this study. It was conducted by: M.S. Treuth, A.S. Ryan, R.E. Pratley, M.A. Rubin, J.P. Miller, B.J. Nicklas, J. Sorkin, S.M. Harman, A.P. Goldberg, and B.F. Hurley. Journal of Applied Physiology, vol. 77, no.2:614-620, 1994.