



Can nine months of heavy strength training prevent the loss of muscle in menopausal women?

We wanted to know:

How effective strength training is to prevent the loss of muscle during menopause?

What is the problem?

Women typically experience loss of muscle mass and strength as they go through the menopause transition, leading to overall lowered quality of life, frailty and increased risk of falls.

How did you study the question?

We randomly split 40 menopausal women into two groups. One group received nine months of heavy strength training classes, while the other group was asked to maintain their current lifestyle. We measured muscle mass and strength before and after the nine months.

What did you find?

We found that the group that performed heavy strength training improved their muscle mass and strength after nine months. We also found that the group asked to maintain their current lifestyle had an overall decline in their muscle mass and strength. Overall, heavy strength training may be an effective strategy to prevent the loss of muscle experienced by menopausal women.

How can this research be used?

Healthcare and exercise professionals can use these findings to improve care for women going through menopause. By offering heavy strength training as a solution to the loss of muscle, women can benefit from the reduced frailty and improved quality of life. If women can stay stronger for longer, we could reduce preventable falls and lighten the burden on the healthcare system.

Cautions

This study only looked at 40 women which may not accurately represent the general population. We also did not control any other life aspect, like diet, which could affect our results.

Funding sources: This study was supported by University of Calgary seed grants (i.e., Clinical Research Fund, VPR Catalyst Grant, and a McCaig Institute for Bone and Joint Health Seed Grant) and an Alberta Health Services Bone and Joint Strategic Clinical Network and McCaig Institute Translational Impact Grant.

