

Les Mills Lab: BODYPUMP: improving strength and speed in older adults



Background

It is a well-established fact that our strength and speed deteriorate as we age, and this is typically seen once we get into our 40s and 50s. Resistance training is recognized as an effective way to help prevent this deterioration.

Aim of the research

To investigate whether BODYPUMP™ could improve maximal strength and walking speed in healthy and active older adults.

Method

Sixty eight participants aged 55 and over took part in the study and were split into two groups; one that completed 26 weeks of BODYPUMP training and one that served as a control. The BODYPUMP group trained twice a week for six months while the control group did not undergo any training and were instructed to maintain their current level of physical activity over this period.

Maximal strength and gait speed were assessed at the beginning and the end of the trial.

Results

Researchers saw significant improvements in the BODYPUMP group including: a 13% increase in leg strength and a 14% increase in upper body strength. Gait speed increased by 23%. Participants also significantly increased their squat weight during the study.

Increases seen in gait speed were greater than what is typically seen in conventional resistance training programs. By way of background, gait speed is of particular importance as we age, as a slowed pace of walking can indicate a reduction of efficiency – which can predict impending health issues. In essence, gait speed is a simple way to assess a person's vitality.

Conclusion

This study was the first of its kind to demonstrate that high-repetition / low-load training programs can effectively improve strength and speed in middle-aged and older adults. It also proved that BODYPUMP is an effective way to maintain our health as we age.

A link to the published abstract in the Journal of Science and Medicine in Sport is available [here](#).