

RESEARCH BRIEF

Community-Based Group Physical Activity And/Or Nutrition Interventions To Promote Health And Mobility In Older Adults: An Umbrella Review

KEY POINTS

- ✓ Group-based physical activity programs that combine different types of exercise are most effective in improving mobility in older adults.
- ✓ No reviews focused on nutrition alone, highlighting a gap in the literature.
- ✓ These results will inform the co-design of the EMBOLDEN program.

What is this research about?

Limited physical mobility and poor diet quality can lead to poor health and well-being of older adults. This review aims to identify the best available research on the effects of group-based physical activity and nutrition programs to promote mobility in older adults (55 years of age and older) living in the community. The results will be summarized and used to inform the co-design of a community-based program.

What did the researchers find?

The results show that physical activity interventions that include both aerobic and resistance training resulted in the strongest effects on physical function, balance, aerobic capacity, muscle strength, and falls. Aerobic exercise (e.g., walking) and resistance training (e.g., exercise bands) have some benefits on their own but are most powerful when combined.

Mind-body exercise (e.g., Tai Chi, yoga, Pilates) can improve balance and strength. Taking part in dance classes can also improve daily functioning and balance.

No reviews focused exclusively on group-based nutrition interventions.

Where do we go from here?

The results of this review will be shared with the EMBOLDEN Strategic Guiding Council to help identify the design features of the EMBOLDEN intervention.

Finding a gap in synthesized evidence related to nutrition interventions, we are conducting a systematic review of intervention studies to determine if group-based nutrition programs targeting healthy eating in community-dwelling older adults improve nutritional intake, access to nutrition or other markers of health and mobility.

STUDY LEAD: Neil-Sztramko S

CO-INVESTIGATORS: Phillips S, Sherifali D, Fitzpatrick-Lewis D, Newbold B, Alvarez E, Kuspinar A, Kennedy C, Santaguida P & Ganann R

COMMUNITY PARTNERS: Petrie P, Jain K, Sheikh A, Adams J

RESEARCH COORDINATOR: Moore C

TRAINEES: Teggart K, Coletta G

<https://achru.mcmaster.ca/research-studies/embolden-trial-partnering-older-adults-and-communities-develop-and-test-community>

Neil-Sztramko, S.E., Teggart, K., Moore, C., Sherifali, D., Fitzpatrick-Lewis, D., Coletta, G., Phillips, S.M., Newbold, K.B., Alvarez, E., Kuspinar, A., Kennedy, C.C., Santaguida, P.L., Ganann, R. Community-Based Physical Activity and/or Nutrition Interventions to Promote Mobility in Older Adults: An Umbrella Review. 03 June 2021, PREPRINT (Version 1) [<https://doi.org/10.21203/rs.3.rs-578194/v1>].