

Fit and Strong!

What is it?

- Fit and Strong! combines strength training, aerobic conditioning, and arthritis self-management education into an 8-week series of classes. Designed by researchers at the University of Illinois at Chicago, the program is aimed at helping participants manage arthritis by boosting physical function and self-confidence, and by providing the tools for making and sustaining beneficial behavioral and lifestyle changes.
- Group sessions are 90 minutes long and meet three times per week for 8 weeks.
 - Participants spend the first 60 minutes of a session on stretching, balance, range of motion, endurance, and resistance exercises focused on the lower extremities. Resistance training involves the use of cuff weights and therabands provided by the facility.
 - Specific exercises—such as sit-to-stand and floor-to-stand progressions and complex walking patterns requiring balance and agility—are meant to translate to daily activities and support participants' independent physical functioning.
 - During the last 30 minutes of a session, participants learn problem-solving and other self-management techniques.
 - Before the end of the program, participants meet one-on-one with the instructor to develop an individualized exercise plan that they can maintain after the last class.
- Fit and Strong! instructors are certified exercise instructors or licensed physical therapists (PTs) who have completed an 8-hour training course.
- Materials such as exercise log books are provided to encourage adherence.

Who is it for?

Fit and Strong! is designed for sedentary older adults with osteoarthritis, particularly those experiencing lower-extremity joint pain and stiffness.

What are the benefits?

- Preliminary studies suggest that Fit and Strong! can safely reduce symptoms of osteoarthritis and encourage participants to stay active. Benefits may last up to 12 months and include:
 - Increased physical activity levels
 - Increased confidence in ability to exercise
 - Reduced pain
 - Reduced joint stiffness
- Experience with Fit and Strong! has been positive. In feedback collected from participant evaluations, 99% reported that they had benefited from the program and 98% would recommend it to a friend.

For More Information

- Fit and Strong! Program Web site
www.fitandstrong.org
- Centers for Disease Control and Prevention
www.cdc.gov/arthritis/interventions/physical_activity.htm

Contact

References

Hughes SL, Seymour RB, Campbell R, et al. Impact of the Fit and Strong! intervention on older adults with osteoarthritis. *The Gerontologist*. 2004;44(2):217–228. PMID: 15075418.

Hughes SL, Seymour RB, Campbell RT, et al. Long-term impact of Fit and Strong! on older adults with osteoarthritis. *The Gerontologist*. 2006;46(6):801–814. PMID: 17169935.

Seymour RB, Hughes SL, Campbell RT, et al. Comparison of two methods of conducting the Fit and Strong! program. *Arthritis and Rheumatism*. 2009;61(7):876–884. PMID: 19565560.

Summary of the Evidence

Author, Year	Design	Participants	Outcomes
Hughes SL, Seymour RB, Campbell R. et al. (2004)	RCT with wait-list control Outcomes assessed at 2 and 6 months	150 older adults with osteoarthritis in lower extremities	↑ ability to exercise, adherence to exercise ↓ pain and stiffness
Hughes SL, Seymour RB, Campbell RT. et al. (2006)	RCT with wait-list control Outcomes assessed at 2, 6, and 12 months	215 older adults with osteoarthritis in lower extremities	Outcomes sustained at 12 months: ↑ exercise efficacy ↑ self-efficacy over time
Seymour RB, Hughes SL, Campbell RT, et al. (2004)	Two-group comparison of instruction by PTs vs. certified exercise instructors Outcomes assessed at 8 weeks and 6 months	351 participants	Outcomes for both groups: ↑ lower extremity strength, physical function ↑ pain, stiffness Better self-efficacy for exercise in PT-led group