

## EVIDENCE IN THE MAKING

# BREAKING DOWN RESISTANCE

## Research Shows Benefits of Lifting Weights on Cognition in Older Adults

### THE CHALLENGE

Researchers are increasingly exploring the benefits of lifestyle change, such as exercise, to slow down the progression of dementia. But, based on recommendations from doctors and health officials, many older adults limit their exercise to stretching, walking, toning or aerobics. "In the last few years, it's been believed that aerobics has been the most beneficial type of exercise to fight off dementia," says Dr. Teresa Liu-Ambrose of the University of British Columbia. "We thought other types could also be helpful, but not a lot of people believed in it." Her challenge has been to build the research evidence needed to win over the skeptics, among researchers, policy makers and seniors alike, about the merits of resistance training – lifting weights – to maintain cognitive abilities.

**Research:** In a 2011 study, Dr. Liu-Ambrose showed that 12 months of progressive resistance training once or twice a week had a greater impact on improving cognitive skills in older women than the same amount of balance and toning exercises. Seniors are often hesitant to lift weights, however. "They're concerned about fractures or sprains. But, like everything else, with proper guidance resistance training is perfectly safe," says Dr. Liu-Ambrose. Working with a communications company, Dr. Liu-Ambrose and her research team developed and tested two videos to promote the benefits of resistance training. The team has posted the videos on Youtube and distributes them to health care professionals and seniors' organizations. They have received requests from around the world for permission to duplicate the videos in other languages. "Resistance training is appealing because not every older adult has the mobility to take part in aerobics, or can walk for long periods," she says. "The more options we can give people for exercise, the better."

**Sources:** Liu-Ambrose, Teresa, et al. "Resistance training and functional plasticity of the aging brain: A 12-month randomized controlled trial." *Neurobiology of Aging*, 8 (2012):1690–1698. Exercise is Power: Resistance Training for Older Adults (A Guide for Health Professionals) <http://www.youtube.com/watch?v=jeddHew-Vo>.

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