

STRONG IN BODY & MIND

by Karlie Intlekofer, Ph.D.

You're already encouraging your clients to make strength training a regular part of their exercise routine, since a loss of strength as a person ages can threaten both their independence and their wellbeing. Yet beyond being able to physically do the things they love, there's a new reason to encourage older clients to find a strength training solution that works for them. Recent evidence suggests that strength training combined with an active lifestyle can not only keep the body strong, but also protect the brain and thinking abilities.

The Dangers of Dementia

It is no surprise that worries about dementia loom large among older clients. Dementia is a progressive brain disease that involves severe social and thinking impairments. This widespread disease affects more than 55 million individuals worldwide, with nearly 40% of 50- to 64-year-olds having a family member with dementia. It has an enormous impact on the individual and their loved ones, and though dementia has no cure, physical activity is the top modifiable risk factor.

Fighting Dementia with Strength

In advanced age, brains tend to change in ways that limit their function. However, individuals who remain strong and active do not show the same changes as those who are inactive. In addition to having brains that avoid age-related structural changes, stronger individuals fare better in cognitive testing. On average, stronger individuals have a greater ability to reason, remember and problem-solve well into advanced age. In fact, regular exercise can lower dementia risk by 30% to 45%, depending on the type of dementia. A growing mountain of evidence shows that strength tests are a good indicator of thinking abilities, so retaining muscle mass is all the more important for aging clients.

"The message is clear," explained dementia expert Dr. Michael Valenzuela. "Resistance exercise needs to become a standard part of dementia risk-reduction strategies."



Strength Predicts Brain Health

Many studies support the link between strength and brain health. For example, one study monitored over 1,000 older adults for 15 years, documenting their lifestyles and medical histories while testing their strength along the way. The results determined that lower strength was a significant risk factor for developing dementia, independent of genetic risk and lifestyle factors such as smoking and alcohol use. Those who had the largest decline in strength were in fact twice as likely to develop dementia compared to those who had maintained their strength throughout the 15-year study.

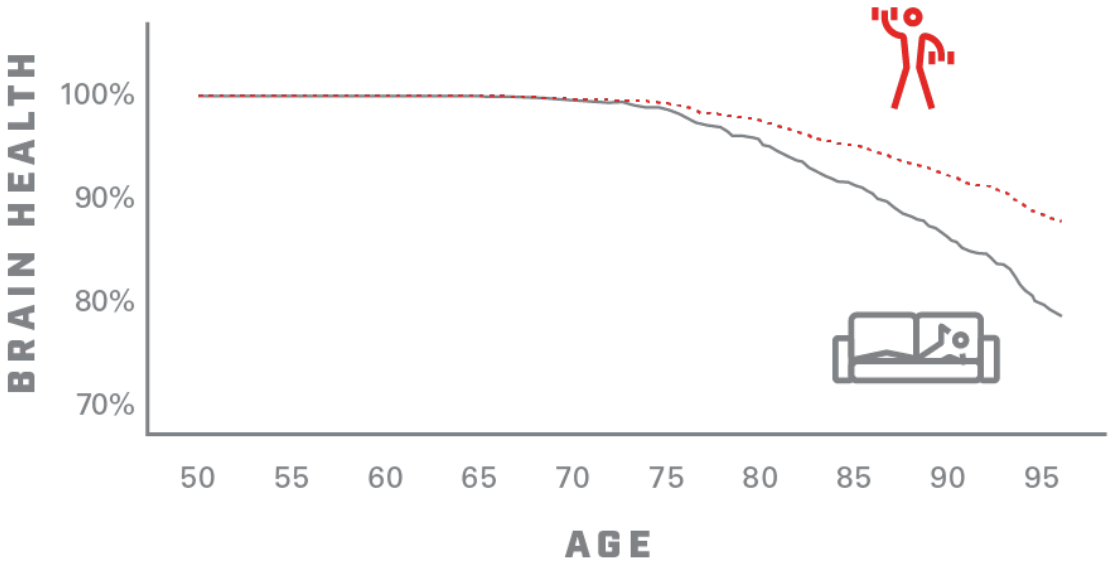


Learning to be Strong

So, why is strength so important to the brain health of your aging clients? It may be because muscle strength is a skill gained through repeated physical challenges. The brain coordinates the majority of muscle contractions, so every workout is a chance to fine-tune motor skills. In fact, recent evidence shows that this strength-cognition advantage is more than simply correlation. Brain scans and cognitive testing can be done before and after exercise interventions to determine how regular workouts influence the structure and function of the brain. In older adults, these studies show that several months of regular exercise actually enlarges brain regions associated with memory, a result backed up by cognitive testing. More and more medical and thereputic experts are embracing the fact that strength training actually causes positive brain changes.

Bolstering Brain Health, One Rep at a Time

Studies indicate that older individuals enjoy significant brain benefits from strength training, even if they only participate in one sessions per week. Additional evidence suggests that for the best outcomes and measurable improvements to brain structure, two or more strength training sessions per week are ideal. For all the older adults you work with, be sure to encourage them to view strength training as a way to build not only a stronger body, but also a healthier brain.



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Dr. Karlie Intlekofer is a neuroscientist who focuses on the benefits of exercise for brain health and well-being. She has a background in research and teaching at the university level and focuses on exercise motivation and brain areas involved in stress, learning and memory. Her passion in this field is bolstered by experience working with a wide range of ages and abilities as a personal trainer and group exercise instructor. As the Global Wellness Researcher at Matrix Fitness, Karlie integrates evidence-based practices into exercise programming and develops initiatives that support an enduring habit of physical activity.