

# Strong Bodies Beat Alzheimer's

By Richard J. Wolff, RD, LDN

With millions suffering from Alzheimer's or similar dementia, Americans fear the worst – what if it happens to me? In response to this growing concern, the federal government has introduced the National Alzheimer's Prevention Project. Physicians participating in the project are viewing this as an opportunity to have a real impact on this debilitating disease. What Americans don't realize is that exercise can play a role in preventing Alzheimer's disease! A growing body of research has linked exercise to better brain health, including increases in brain volume. This is important because low brain volume is linked to cognitive impairment and dementia.

The best evidence linking exercise to improved brain health comes from a study funded by the National Institute on Aging. In the study, those who walked briskly for 40 minutes three days a week had increased volume of the hippocampus, the part of the brain involved in memory formation. The realization that exercise can increase brain volume is a real breakthrough in the fight against Alzheimer's disease.

According to researchers from the University of British Columbia, full-body strength workouts improve brain health. In a study involving men and women age 65 to 75, one or two full-body strength workouts per week resulted in improvements in “executive cognitive functions” which usually decline with age. A follow-up study on the same group in the *Archives of Internal Medicine* found that some of the benefits were sustained a year after the program ended – in those who remained physically active. These studies confirm earlier research from Brazil, which found that six months of strength training provided cognitive benefits. The Brazilian researchers suggest that strength training, like aerobic exercise, may improve blood flow to the brain.

Strength training also protects brain health by keeping you active. A review of 78 studies in the *Journal of Psychosomatic Research* links inactive lifestyles to unusual stress on brain chemistry. Fortunately, small amounts of physical activity can offset this stress. However, losing muscle reduces your ability to stay active and maintain brain health. The average American loses approximately ½ lb. of muscle every year beginning in their early 40s. This trend contributes to muscle weakness, making it increasingly difficult to stay active.

According to Dr. Walter Bortz, Professor of Medicine at Stanford University, your legs are your most important organ as you age <sup>1</sup>. If you have strong legs, your brain is healthier! Strong legs support brain health because they keep you active. The best way to keep your legs strong is to include resistance exercise (e.g., strength training) in your lifestyle. Many Americans skip strength training because they think aerobic activity (e.g.,

walking, biking, swimming and running) will keep them healthy. However, aerobic activity does not prevent the muscle wasting that leads to strength loss.

Multiple studies reinforce the link between strength training and active lifestyles<sup>2</sup>. Maintaining strength as you age allows you to live the active lifestyle associated with better brain health. At MEDFITNESS, clients frequently share stories of how active they have become as a result of their new-found strength. Scientists now recognize muscle loss as a major contributor to inactive lifestyles.

In addition to building active lifestyles, strength training supports brain health by reducing your risk of developing diabetes. A study in the *Journal of Clinical Endocrinology & Metabolism* found that muscle mass was inversely related to the risk of developing diabetes<sup>3</sup>. In other words, the more muscle you have, the less likely you are to develop adult onset diabetes. This is important because a connection between diabetes and Alzheimer's has been uncovered. Elevated blood sugar associated with diabetes can damage blood vessels in the brain. A study in the journal *Neurology* has found that poor blood sugar control over a 15-year period contributed to the development of dementia. The researchers from the study concluded that blood sugar control is critical to prevent future dementia.

More than ever, Americans have reasons to include strength training in their lifestyle. At MEDFITNESS we recognize this need and have designed our program to support compliance no matter how busy life gets. In less than one hour per week, you can restore lost muscle and regain the strength needed to stay active at any age!

#### References

1. HMR at Home Program, June 2010
2. American Journal of Lifestyle Medicine. 2009;3(6):466-473
3. University of California at Berkley. Wellness Letter, December 2011

### **Get Help Beating Alzheimer's**

The MEDFITNESS Workout is a safe and efficient way to reduce your risk of Alzheimer's disease and mental illness. You can experience the MEDFITNESS Workout by scheduling a *Free Trial Workout* at (630) 762-1784. Get additional information about the MEDFITNESS Program by visiting [www.medfitnessprogram.com](http://www.medfitnessprogram.com).

### **About the Author**

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