



WHAT IS THE ROLE OF EXERCISE IN PRESERVING COGNITION?

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Abstract

Increasing lifespan of a population is often a marker of a country's success. With the percentage of the population over 65 years of age expanding, managing the health and independence of this population is an ongoing concern. Advancing age is associated with a decrease in cognitive function that ultimately affects quality of life. Aging is associated with vascular dysfunction, elevated cardiovascular disease risk, and increased Alzheimer's Disease pathology. In addition, aging alters cerebrovascular physiology, cerebral perfusion, and is associated with brain atrophy. Clinically, these pathophysiological changes present as reduced cognitive function, neurodegeneration, and the onset of dementia. Understanding potential adverse effects of aging on brain blood flow and brain structure may help to determine effective strategies to mitigate these effects on the population. Exercise may be one strategy to prevent or delay cognitive decline. Regular exercise has been shown to improve cognitive function, likely through beneficial adaptations of vascular physiology. This presentation will review the age-associated variables, how they interact to negatively impact cognition, and how these may be moderated by regular exercise to preserve cognitive function.

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