

Cognitive Training Found Most Effective Lifestyle Intervention to Prevent Cognitive Decline

San Francisco, November 10, 2025 (GLOBE NEWSWIRE) — A comprehensive systematic review of lifestyle interventions to prevent cognitive decline, which [published in the prestigious British medical journal The Lancet](#), found that cognitive training (including BrainHQ) is the single intervention with the largest benefit. This recent result carries even more weight in the wake of [a recently published pivotal study](#) from researchers at McGill University, providing a biochemical explanation for what makes the [BrainHQ](#) brain training program from [Posit Science](#) so effective.

The systematic review published in The Lancet addresses an issue raised since the [Lancet Commission published its finding in 2017](#) that 35% of cases of Alzheimer's might be prevented through 9 lifestyle adjustments (prior to updating its finding, [in 2024, to 45% with 14 lifestyle adjustments](#)): From a practical point of view, which interventions are most beneficial?

“While I appreciate the value of advising people of the many risk factors that contribute to the likelihood of developing Alzheimer's, frankly, asking someone to make 14, 9 or even 4 lifestyle adjustments may be asking too much,” observed neuroscientist Dr. Henry Mahncke, CEO of Posit Science. “What's exciting about the new review article in Lancet is that the researchers evaluated 109 studies of lifestyle interventions, and then ranked the interventions based on their individual and combined ability to improve cognitive function.”

The reviewers found: “When compared with active control, only physical exercise and cognitive training combined and cognitive training alone revealed significant improvement of global cognition.”

Surprisingly, the reviewers found that studies with more interventions (for example, adding dietary advice or health education) did not offer greater benefit than just cognitive training alone or the combination of cognitive training and physical exercise.

They went on to observe: “In multidomain protocols, participants must simultaneously modify their behavior across several domains, such as diet, physical activity, cognitive training, and vascular risk management. Although theoretically appealing, this behavioral burden might reduce long-term adherence.”

This unexpected finding took on more resonance with the recent publication of the [McGill neuroimaging](#) study, which found that 10 weeks of cognitive training using the BrainHQ brain-plasticity-based cognitive training program (for 30 minutes a day) resulted in a significant rejuvenation in the production of acetylcholine (the “pay attention chemical”) equal to about a decade of improvement in a critical system known to downregulate with normal aging and to plummet with Alzheimer's disease and other health conditions.

“The training restored cholinergic health to levels typically seen in someone 10 years younger,” said senior author [Dr. Etienne de Villers-Sidani](#), an Associate Professor in McGill’s Department of Neurology and Neurosurgery and neurologist at The Neuro (Montreal Neurological Institute-Hospital). “This is the first time any intervention, drug or non-drug, has been shown to do that in humans.”

The McGill study identified the biological mechanism — upregulation of acetylcholine, which is known to help with attention, learning, mood, and brain plasticity — as a possible explanation for the unique results BrainHQ cognitive training has demonstrated in brain health and human performance across [hundreds of peer-viewed scholarly studies](#).

“The focus on simple lifestyle changes to reduce risk is extremely important given the failure to date in finding a pharmaceutical solution,” noted Dr. Henry Mahncke, CEO of Posit Science. “This new systematic review of multiple lifestyle interventions offers people a bit more guidance in developing a more manageable plan for making decisions about which lifestyle changes they should adopt. When investing time and money, it’s reasonable for people to look to the research community to understand how to get the most bang for their buck. If you are going to do one or two things, brain training should be one of them.”

BrainHQ exercises have shown [benefits in more than 300 studies](#). Such [benefits include](#) gains in cognition (attention, speed, memory, decision-making), in quality of life (depressive symptoms, confidence and control, health-related quality of life) and in real-world activities (health outcomes, balance, driving, workplace activities). BrainHQ is used by leading health and Medicare Advantage plans, by leading medical centers, clinics, and communities, and by elite athletes, the military, and other organizations focused on peak performance. Consumers can try a BrainHQ exercise for free daily at <https://www.brainhq.com>.

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