

PROMOTING BRAIN HEALTH: LIFESTYLE STRATEGIES TO REDUCE COGNITIVE DECLINE

EVIDENCE-BASED LIFESTYLE STRATEGIES can lower the risk of Alzheimer's Disease (AD) and slow cognitive decline. Women make up two-thirds of Alzheimer's disease (AD) cases, with the risk of onset rising with age. However, cognitive decline often begins decades before symptoms appear. Lifestyle choices may delay the onset of AD.

STRESS MANAGEMENT



Goal: Employ stress reduction strategies such as mindfulness, physical activity, sleep, social interactions, yoga, time in nature, and relaxation techniques. Reducing stress helps lower the risk of dementia by decreasing chronic cortisol levels, which may damage the hippocampus (a key memory center), impair synaptic plasticity, increase inflammation, and disrupt sleep — all factors that contribute to cognitive decline.

COMMIT TO REGULAR PHYSICAL ACTIVITY

Goal: ≥ 150 minutes/week of moderate exercise and at least 2 sessions weekly of strength training. Aerobic activities that boost heart rate such as walking, jogging, cycling, gardening, and strength training have been shown to reduce AD risk by improving brain blood flow, reducing inflammation, and supporting neuroplasticity.



PRIORITIZE PLANT- BASED NUTRITION



Goal: Adopt the MIND diet (Mediterranean-DASH Intervention for Neuro-degenerative Delay), a heart-healthy, brain-healthy diet that emphasizes whole grains, leafy green vegetables, berries, fish, beans, nuts, and olive oil, while minimizing red meat, butter, cheese, fast foods, and sweets.

RESTORATIVE SLEEP

Goal: 7-8 hours of restorative sleep. Sleep disturbance contributes to cognitive decline and might also increase the risk of Alzheimer's disease by increasing β -amyloid burden. A 1% reduction in deep sleep each year for people over 60 years of age has been associated with a 27% increased risk of developing dementia and a 32% increased risk of Alzheimer's disease. Address conditions like sleep apnea, insomnia, and restless leg syndrome.





AVOIDANCE OF SMOKING & ALCOHOL

Goal: Limit alcohol, avoid nicotine and opioids. These substances have a negative dose-response on cognitive function and may contribute to dementia risk by impairing cognitive functions.

SOCIAL CONNECTIONS

Goal: Engage in regular interaction with family, friends, and community. Relationships and social interaction enhance cognitive reserve, lower stress, loneliness, and depression, promote neuroplasticity, reduce inflammation, and improve vascular health — all of which help protect against neuro-degeneration.



THE BOTTOM LINE: Lifestyle choices have a substantial impact on brain health. Prevention is the best medicine — small steps, consistently applied, offer powerful protection. By practicing healthy habits and remaining consistent, individuals can reduce their risk for dementia.

SOURCES:

Himali JJ et al. Association Between Slow-Wave Sleep Loss and Incident Dementia. *JAMA Neurol.* 2023;80(12):1326-1333.

Jaqua EE, Tran MN, Alvarez P, Gupta M, Yoong J. Dementia and Cognitive Decline: A HEALM Approach. *Am J Lifestyle Med.* 2024:15598276241291508.

Livingston G et al. Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. *Lancet.* 2020;396(10248),413-446.

Ramey T, Regier PS. Cognitive impairment in substance use disorders. *CNS Spectr.* 2019;24(1):102-113.

van den Brink AC et al. The Mediterranean, Dietary Approaches to Stop Hypertension (DASH), and Mediterranean-DASH Intervention for Neurodegenerative Delay (MIND) Diets Are Associated with Less Cognitive Decline and a Lower Risk of Alzheimer's Disease-A Review. *Adv Nutr.* 2019;10(6):1040-1065.

