

Effects of Caffeine on Alzheimer's disease: A Retrospective Meta-Analysis

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Abstract

The present study was designed to find out the effect of Caffeine on Alzheimer's disease.

Background: *Alzheimer's disease is an irreversible, progressive brain disorder that slowly destroys memory and thinking skills and, eventually, the ability to carry out the simplest tasks. Caffeine is a natural stimulant most commonly found in tea, coffee and cacao plants. It works by stimulating the brain and central nervous system, helping you to stay alert and preventing the onset of tiredness.*

Method: *The present study is a retrospective meta-analysis was conducted to prove the putative protective effects of caffeine against dementia/AD are of great interest. We have collected findings from few longitudinal epidemiological studies about caffeine/coffee and dementia/AD/cognitive function and compiled all these study results and presented.*

Results: *The findings of the previous studies are somewhat inconsistent and most of the studies support coffee's favorable effects against cognitive decline, dementia or AD. In the CSHA studies, they have been a decreased of over 31% in Alzheimers Patients over 65 years. Moderate coffee drinkers had a 62-64% decrease when compared to low coffee consumers. Further, most of the studies have shown that, coffee drinking both at midlife and later in life have shown to be related with a decreased risk of Cognitive impairment/Alzheimer's Disease. In recent studies, performed on mice, it has been shown that Caffeine and A2 alpha receptors prevent amyloid-Beta induced cognitive deficits. Interestingly in the same study it was shown that Caffeine reverses cognitive impairment and decrease amyloid-beta levels in the brain of Alzheimer's disease mice. Owing to its Neurologic advantages, it was also proved that Caffeine have many benefits in the cardiovascular System in a moderate consumption.*

Conclusion: *It appears that moderate caffeine consumption may decrease the risk of Cognitive Impairment/Alzheimer's disease. Hence, the coffee consumption globally might show decrease the development or delay of onset of Alzheimer's disease.*

Keywords: *Alzheimer's disease; caffeine; Cognitive impairment.*