In Seniors Moderate Coffee and Tea Habits Linked to Sharper Thinking

Researchers investigated the association between different levels of tea and coffee consumption and long-term changes in cognitive performance among older adults. Their results indicated that moderate coffee intake, as well as moderate to high tea intake, may be linked to slower cognitive decline, and that moderate coffee intake may be more beneficial than high intake.

Study

In this study, researchers analyzed data from 8,715 participants in the UK aged 60–85 years who were dementia-free at baseline and followed over an average of 9.11 years. Participants were excluded if they had medical conditions or were on medications that could affect cognitive health, such as Parkinson's, depression, diabetes, hypertension, or were consuming more than 14 units of alcohol per week.

Coffee and tea intake over the previous year was self-reported and categorized into three groups: never, moderate intake (between one and three cups per day), or high intake (more than four cups per day). Cognitive function was assessed using computerized tests measuring fluid intelligence (the ability to solve verbal and numeric reasoning problems), reaction time, numeric memory, and pair-matching errors (a test of visual memory).

Demographic and genetic data, including socioeconomic status, body mass index (BMI), ethnicity, education, age, sex, and Apolipoprotein E genotype, were recorded and controlled for in the analysis. Cognitive changes were assessed using linear mixed models, including time as an interaction variable. Data were adjusted for key covariates and corrected for multiple comparisons using the false discovery rate (FDR). Skewed cognitive variables were transformed for normality.

Participants were required to undergo at least two cognitive assessments during the study period. By excluding reports of extreme beverage consumption and controlling for confounders, the study aimed to isolate the effects of moderate and high coffee and tea intake on cognitive aging.

Results

The study found that daily coffee and tea intake predicted changes in cognitive performance over time, particularly in fluid intelligence. Participants who reported never drinking coffee or moderate coffee consumption experienced a slower decline in fluid intelligence compared to those with high coffee intake. These groups also exhibited a smaller increase in pair-matching errors, indicating better preservation of visual memory over time. However, no significant associations were observed between coffee intake and reaction time or numeric memory.

For tea, both moderate and high intake were linked to a slower decline in fluid intelligence compared to those who never consumed tea. These associations remained statistically significant after correcting for multiple comparisons. However, at baseline, those who drank tea performed slightly worse on the fluid intelligence task. Tea intake was not associated with changes in reaction time, pair-matching errors, or numerical memory across the follow-up period.

Overall, moderate coffee and tea intake appeared to protect against certain forms of cognitive decline in older adults, particularly in reasoning and problem-solving abilities. In contrast, high coffee consumption (four or more cups daily) was associated with a faster decline.

Conclusion

This study showed that moderate coffee and both moderate and high tea intake were associated with slower declines in fluid intelligence over nearly a decade, suggesting potential cognitive benefits in older age. While the protective effects were more apparent for tea and moderate coffee intake, high coffee consumption (four or more cups per day) was linked to poorer outcomes.

These findings align with some prior research but contrast with studies using global cognitive measures or shorter assessments.

Strengths include the large, well-characterized sample and long follow-up duration. However, limitations include self-reported beverage intake (subject to recall bias), lack of data on mid-life consumption or coffee preparation methods (such as decaffeinated vs. caffeinated, brewing method, or the addition of milk and sugar), or the specific types of tea consumed (e.g., black, green, or white).

Additionally, potential confounding factors, such as stress or sleep disruption, may not have been fully accounted for.

Despite these limitations, the results suggest that moderate consumption of coffee and tea may be protective against age-related cognitive decline. The researchers speculate that caffeine may be a key factor, noting that tea's lower caffeine content could explain why no upper limit for beneficial tea consumption was observed in this study. Further randomized controlled trials are needed to confirm causal relationships and inform guidelines.

Source:

https://www.news-medical.net/news/20250728/Moderate-coffee-and-tea-habits-linked-to-sharper-thinking-in-seniors.aspx