



Neurodegenerative disorders

Questions patients ask

Q: Does drinking coffee help prevent cognitive decline in older adults?

A: Research suggests that regular, moderate coffee drinking over a lifetime slows down cognitive decline as we get older¹, especially in women and those over 80 years old in particular^{2,3,4}.

Q: How does coffee slow down cognitive decline as we get older?

A: The exact mechanism behind coffee's beneficial effect on cognitive function in older adults is not yet known, however caffeine^{1,2,3} and other coffee components like anti-inflammatory compounds may play a role.

Q: Are the elderly particularly sensitive to coffee's effects on cognitive decline?

A: Yes. In many studies, young and elderly participants appear to respond to the effects of caffeine in coffee differently. Overall, older adults are more sensitive to the protective effects of coffee/caffeine on declining mental performance than younger adults^{5,6,7}.

Q: Am I less likely to get Alzheimer's disease if I drink coffee?

A: It is too early to say although the majority of studies do suggest that older adults who drink moderate amounts of coffee regularly over a lifetime may be less likely to develop Alzheimer's Disease than non-coffee drinkers^{1,8}. Further research is needed.

Q: How much coffee do I need to drink to reduce my risk of getting Alzheimer's disease?

A: Although it is too early to draw firm conclusions, studies suggest that older adults who drink moderate amounts of coffee (3-4 cups of caffeinated coffee) regularly over a lifetime may be less likely to develop Alzheimer's disease than non-coffee drinkers^{1,8,9}.

Q: How does coffee work to reduce the risk of Alzheimer's disease?

A: It is too early to say as the mechanisms are not yet known. More research is needed.

Q: Am I less likely to get Parkinson's disease if I drink coffee?

A: Research suggests that regular coffee consumption may reduce, or delay, the development of Parkinson's disease in men and in women who are not on hormonal therapies^{10,11,12,13,14}.

Q: How much coffee do I need to drink to reduce my risk of getting Parkinson's disease?

A: The optimal amount of coffee has not been established yet, however positive effects have been reported for moderate consumption (3-5 cups per day).

Q: How does coffee work to reduce the risk of Parkinson's disease?

A: Caffeine in coffee is likely to be the compound responsible for coffee's potentially beneficial effect^{15,16}. More work is needed to confirm its exact mechanism of action.

Q: Am I less likely to suffer a stroke if I drink coffee?

A: Research shows that moderate coffee drinkers may be less likely to suffer a stroke than non-coffee drinkers^{17,18,19}.

Q: How much coffee do I need to drink to reduce my risk of suffering a stroke?

A: Research shows that moderate coffee drinkers, who drink approximately 3-5 cups of caffeinated coffee per day, may be less likely to suffer a stroke than non-coffee drinkers^{17,18,19}.

Neurodegenerative disorders

References

- 1 Santos C. et al. (2010) Caffeine intake and dementia: systematic review and meta-analysis. *J Alzheimers Dis*, 20 Suppl 1:S187-204.
- 2 Johnson-Kozlow M. et al. (2002) Coffee consumption and cognitive function among older adults. *Am J Epidemiol*, 156:842-850.
- 3 Ritchie K. et al. (2007) The neuroprotective effects of caffeine: a prospective population study (the Three City Study). *Neurology*, 69:536-545.
- 4 Beydoun M.A. et al. (2014), Caffeine and Alcohol Intakes and Overall Nutrient Adequacy Are Associated with Longitudinal Cognitive Performance among U.S. Adults. *J Nutr*, published online ahead of print, Available at: <http://www.researchgate.net/publication/261773069>
- 5 Swift C.G. & Tiplady B. (1988) The effects of age on the response to caffeine. *Psychopharmacology*, 94:29-31.
- 6 Rees K. et al. (1999) The influences of age and caffeine on psychomotor and cognitive function. *Psychopharmacology*, 145:181-188.
- 7 Jarvis M.J. (1993) Does caffeine intake enhance absolute levels of cognitive performance? *Psychopharmacology*, 110:45-52.
- 8 Barranco Quintana J.L. et al. (2007) Alzheimer's disease and coffee: a quantitative review. *Neurol Res*. 29:91-5.
- 9 Eskelinen M.H. et al. (2009) Midlife coffee and tea drinking and the risk of late-life dementia: a population-based CAIDE study. *J Alzheimers Dis*, 16:85-91.
- 10 Costa J. et al. (2010) Caffeine exposure and the risk of Parkinson's disease: a systematic review and meta-analysis of observational studies. *J Alzheimers Dis*, 20 Suppl 1:S221-38.
- 11 Ascherio A. et al. (2001) Prospective study of caffeine consumption and risk of Parkinson's disease in men and women. *Ann Neurol*, 50:56-63.
- 12 Ascherio A. et al. (2003) Caffeine, postmenopausal estrogen, and risk of Parkinson's disease. *Neurology*, 60:790-5.
- 13 Liu R. et al. (2012) Caffeine intake, smoking, and risk of Parkinson disease in men and women. *Am J Epidemiol*, 175(11):1200-7.
- 14 Qi H. et al. (2014) Dose-response meta-analysis on coffee, tea and caffeine consumption with risk of Parkinson's disease. *Geriatr Gerontol Int*, (2):430-9.
- 15 Morelli M. et al. (2009) Adenosine A2A receptors and Parkinson's disease. *Handb Exp Pharmacol*, 193:589-615.
- 16 Iida M. et al. (1999) Dopamine D2 receptor-mediated antioxidant and neuroprotective effects of ropinirole, a dopamine agonist. *Brain Res*, 838:51-9.
- 17 Larsson S.C. et al. (2011) Coffee consumption and risk of stroke in women. *Stroke*, 42:908-12.
- 18 Larsson S.C. et al. (2008) Coffee and tea consumption and risk of stroke subtypes in male smokers. *Stroke*, 39:1681-7.
- 19 Larsson S.C. & Orsini N. (2011) Coffee consumption and risk of stroke: A dose-response meta-analysis of prospective studies. *Am J Epidemiol*, Nov 1;174(9):993-1001.

Please see www.coffeandhealth.org for recent updates on this topic