

Psychological effects of dietary components of tea: caffeine and L-theanine

This review summarizes the literature on the association between two dietary components of tea, caffeine and L-theanine, and the psychological outcomes of consumption; it also identifies areas for future. The studies reviewed suggest that caffeinated tea, when ingested at regular intervals, may maintain alertness, focused attention, and accuracy and may modulate the more acute effects of higher doses of caffeine. These findings concur with the neurochemical effects of L-theanine on the brain. L-theanine may interact with caffeine to enhance performance in terms of attention switching and the ability to ignore distraction; this is likely to be reflective of higher-level cognitive activity and may be sensitive to the detrimental effects of overstimulation. Further research should investigate the interactive effects of caffeine, L-theanine, and task complexity, utilize a range of ecologically valid psychological outcomes, and assess the neuroprotective effects of L-theanine using epidemiological or longer-term intervention studies among individuals at risk of neurodegenerative disease.

10th April, 2008