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Drinking to remember! Cognitive, neurophysiological and mood effects of rosemary water

The application of herbal supplements as therapeutic treatments and for improving psychological or physical wellbeing in healthy individuals is widely recognized and practiced. The possibility of their use as cognitive enhancers is perhaps less well known or researched. Arguably, the received wisdom of ages assumed that our cognitive functioning was optimal for the environment in which we have evolved. However, recent research has demonstrated that natural interventions can augment cognition and that we are not perhaps at the peak of our performance. The research suggests that natural compounds present in the herb rosemary (*Rosmarinus officinalis*) and absorbed through ingestion, might exert beneficial effects on principle mental operations. Two studies are summarized that demonstrate improvements in cognition by acute consumption of rosemary water with possible mechanisms being identified and evaluated. Enhancement effects for long-term verbal memory, working memory and executive functioning in healthy adults are presented in tandem with measures of brain blood flow and metabolism using near infra-red spectroscopy and electro encephalography. The data suggest augmentation of brain metabolism through enhanced cerebral oxygen extraction. This process leading to increased cortical activity during task completion and faster memory updating processes. The potential for a rosemary water to deliver a physiological stress buffering response during stressful multitasking cognitive activity, whilst maintaining positive and reducing negative subjective evaluations of mood.

Biography

Mark Moss gained his Psychology degree with first class honors in 1995, winning the British Psychological Society Undergraduate Project Prize. He was awarded a PhD in 1999, based on his work investigating the impact of breathing pure oxygen on human cognition. He has published studies investigating Lavender, Sage and Peppermint among others. His focus however, has always returned to Rosemary. He is the Head of the Department of Psychology at Northumbria University in the UK, where he leads a team of 45 academic staff delivering high quality research and education to over 1000 students.

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