

A Highly Bioavailable Curcumin Extract Improves Neurocognitive Function and Mood in Healthy Older People: A 12-Week Randomised, Double-Blind, Placebo-Controlled Trial (OR32-05-19)

Andrew Scholey, Katherine Cox, Andrew Pipingas, and David White

Swinburne University

Objectives: Curcumin (a flavonoid isolated from the spice turmeric) affects several processes involved in neurocognitive aging. We have previously reported that 4 weeks administration of a highly bioavailable curcumin extract (Longvida™) improved working memory and reduced fatigue and stress reactivity in older Australians. This follow-up study (ACTRN12616000484448) was aimed at determining if similar effects were evident following 12 weeks administration of the same extract.

Methods: A double-blind, placebo-controlled, parallel-groups trial was conducted. Eighty participants aged 50–80 years (mean = 68.1, SD 6.34) were randomised to receive administration of Longvida™ (400 mg daily containing 80 mg curcumin) or a matching placebo. Assessment took place at baseline then at 4 and 12 weeks. Outcomes included measures of cognitive performance focusing on memory processes relevant to hippocampal function. Participants also underwent

neuroimaging and measures of mood, cardiovascular function and other blood biomarkers were collected.

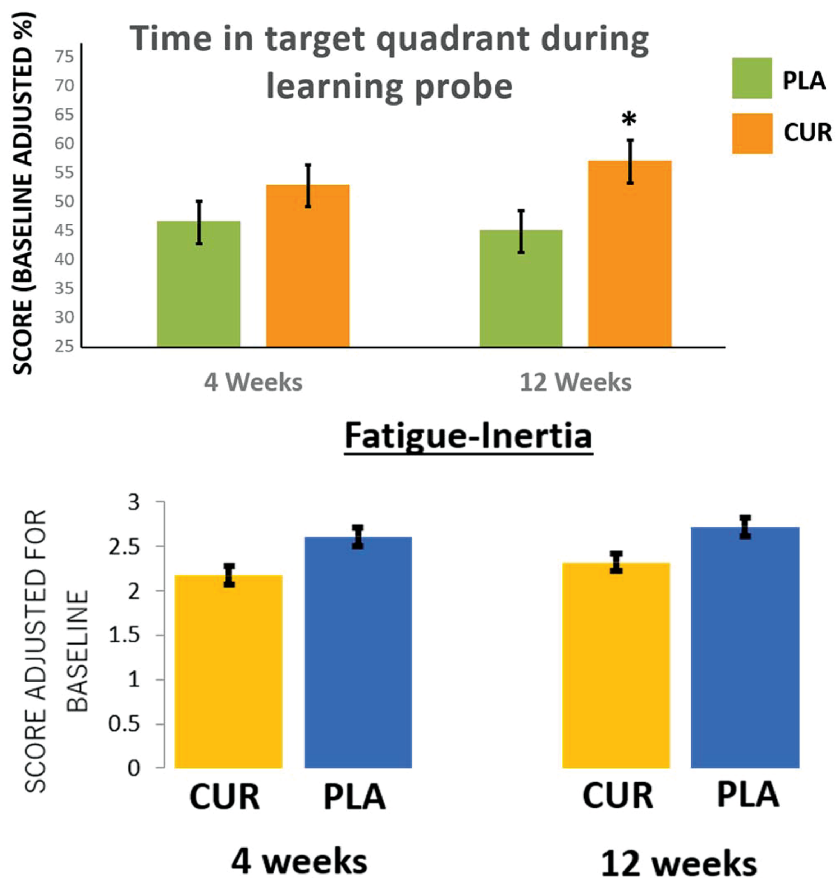
Results: Compared with placebo, there were a number of improvements in the curcumin group. The curcumin group had significantly better working memory performance at 12 weeks, as measured by Serial Threes, Serial Sevens and performance on a virtual Morris Water Maze. Curcumin was also associated with better performance on a pattern separation task. Curcumin was also associated with significantly lower fatigue scores on the Profile of Mood States (POMS) at both 4 and 12 weeks, and of tension, anger, confusion and total mood disturbance at 4 weeks only. There were no group differences in biomarker levels.

Conclusions: These results confirm that Longvida™ improves aspects of mood and working memory in a healthy older cohort. The pattern of results is consistent with improvements in hippocampal function and may hold promise for alleviating cognitive decline in some populations.

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Supporting Tables, Images and/or Graphs



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