

Curcumin for brain health

Company

Verdure Sciences (US)

Problem/opportunity

Extracts of curcumin have low bioavailability so are usually not well absorbed – despite numerous curcumin products being on the market. US company Verdure Sciences have developed a highly bioavailable curcumin product, Longvida, with benefits to several health parameters relevant to cognitive functioning.

We were approached to design and clinical trials to evaluate the efficacy of the product for brain health.

Solution

The first clinical trial was designed and conducted to evaluate the brain, cognitive and mood effects of a modified, highly bioavailable curcumin preparation to benefit mental function in older Australians.

The trial was conducted according to Good Clinical Practice standards. It demonstrated that this curcumin product improved working memory and reduced fatigue in older adults (65 years and older).

Our role

We oversaw two clinical trials.

Outcomes

- This study led to the highly bioavailable curcumin product to be licenced by Blackmores in Australia as 'Brain Active'®, allowing older Australians access to an evidence-based product for brain health.
- In 2018 it was estimated that the product had already produced over 1M AUD in sales in Australia alone.
- This trial won the independent NutraIngredients Industry-University award in 2015 (from over 200 entries across 4 categories).
- A companion piece in The Conversation [3] has been accessed 51,619 times.
- The study was published in Journal of Psychopharmacology in 2015 [1]. The paper currently has 141 citations listed in Scopus and a field-weighted citation impact of 10.54, placing it in the top 1% of all articles in the date range 2017-2011 in the discipline of Medicine.

- Altmetrics captures media and social media mentions. In 2017, the paper had an Altmetrics attention score of 122, placing it in the top 5% of all research outputs ever scored by Altmetrics (N = 9,006,481). Of these mentions 61% were by members of the public and 24% by healthcare professionals.
- The study also attracted a great deal of media attentions (e.g. featuring on Channel 10 and in the Huffington Post amongst others).
- A second trial sponsored by the same company focused on the function of the hippocampus [2] - an important brain structure for memory which shows differential decline with ageing.
- Further trials have been conducted examining the effects of the curcumin product in combination with fish oil.

References

1. Cox KHM, Pipingas A, Scholey AB (2015) Investigation of the effects of solid lipid curcumin on cognition and mood in a healthy older population. *Journal of Psychopharmacology* **29**, 642-651.
2. Cox KHM, White DJ, Pipingas A, Poorun K, Scholey A (2020) Further evidence of benefits to mood and working memory from lipidated curcumin in healthy older people: A 12-week, double-blind, placebo-controlled, partial replication study. *Nutrients* **12**, 1-20.
3. <https://theconversation.com/mellow-yellow-the-mood-and-cognitive-effects-of-curcumin-from-turmeric-63829>

Tags

Curcumin, Working memory, Fatigue, Clinical trial, Verdure Sciences