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# The Journal of Prevention of Alzheimer's Disease

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## The singapore dementia prevention programme: Ten years on and looking ahead

### Letter to the editor

Singapore, a Southeast Asian island nation and global city, faces the pressing challenges of rapid population ageing. In March 2013, an early dementia prevention programme was launched through a collaborative effort involving researchers, psychiatrists, psychologists, non-governmental organisations (NGOs), the private sector, and community volunteers. The programme was introduced to the international community in 2014. At its inception, our goals were ambitious but essential: to reduce the incidence of dementia, improve quality of life, and mitigate the social and familial burden of cognitive decline.

A decade on, we are pleased to report that the programme has generated meaningful impact—not only in scientific publications, but also in improving participants' health and wellbeing, generating new research initiatives, and nurturing a pipeline of emerging scientific leaders.

Our research has demonstrated that multi-domain lifestyle interventions can delay cognitive decline and enhance psychological wellbeing. Specific approaches, including choral singing [1] and mindfulness-based practices [2], have yielded cognitive benefits in older adults. Additionally, dietary factors such as the regular intake of mushrooms [3], fruits and vegetables, and tea [4] were positively associated with cognitive function. These effects may be mediated by plant-based food-related geroprotectors (FRGPs), including ergothioneine, folate, and tea polyphenols.

Building on these findings, we have initiated two new randomized controlled trials. The first investigates whether personalized lifestyle interventions can more effectively slow cognitive decline and biological ageing—measured via epigenetic clocks—compared to a uniform intervention model. This study will also explore whether reduced biological ageing and inflammation mediate cognitive improvement. The second trial evaluates the efficacy of ergothioneine-rich mushrooms in supporting cognitive function, mitigating ageing-related decline, and reducing inflammation. This is grounded in our prior observation that higher mushroom consumption was associated with significantly reduced odds of cognitive impairment, and the identification of ergothioneine as a critical FRGP found in mushrooms [5].

From our ten years of experience, several key lessons have emerged. First, rigorous scientific research provides the necessary evidence base for implementing effective community-based interventions. Second, the sustainability of such programmes depends on active engagement with the private sector and NGOs, as well as diversified and resilient funding streams. To date, our work has been supported by universities,

government funding agencies, private companies, religious organisations, community groups, and anonymous philanthropists. Third, scientific progress is cumulative; therefore, we must continue to cultivate and mentor the next generation of researchers to sustain and grow this work in the decades ahead.

We remain committed to advancing our research and public health efforts, and we look forward to sharing new findings as the Singapore dementia prevention programme enters its second decade.

### Declaration of generative AI and AI-assisted technologies in the writing process

I have not used any AI at all.

### CRediT authorship contribution statement

**Lei Feng:** Conceptualization, Investigation, Resources, Writing – original draft, Writing – review & editing. **Kaisy Xinhong Ye:** Writing – review & editing. **Lee Gan Goh:** Writing – review & editing. **Ee-Heok Kua:** Conceptualization, Writing – review & editing.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### References

- [1] Feng L, Romero-García R, Suckling J, Tan J, Larbi A, Cheah I, et al. Effects of choral singing versus health education on cognitive decline and aging: a randomized controlled trial. *Aging (Albany NY)* 2020;12:24798–816.
- [2] Yu J, Rawtaer I, Feng L, Fam J, Kumar AP, Kee-Mun Cheah I, et al. Mindfulness intervention for mild cognitive impairment led to attention-related improvements and neuroplastic changes: results from a 9-month randomized control trial. *J Psychiatr Res* 2021;135:203–11.
- [3] Feng L, Cheah IK, Ng MM, Li J, Chan SM, Lim SL, et al. The Association between mushroom consumption and mild cognitive impairment: a community-based cross-sectional study in Singapore. *J Alzheimers Dis* 2019;68:197–203.
- [4] Chan SP, Yong PZ, Sun Y, Mahendran R, Wong JCM, Qiu C, et al. Associations of long-term tea consumption with depressive and anxiety symptoms in community-living elderly: findings from the diet and healthy aging study. *J Prev Alzheimers Dis* 2018;5:21–5.
- [5] Cheah IK, Feng L, Tang RMY, Lim KHC, Halliwell B. Ergothioneine levels in an elderly population decrease with age and incidence of cognitive decline; a risk factor for neurodegeneration? *Biochem Biophys Res Commun* 2016;478:162–7.

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